



Colonial Reports

Northern Rhodesia

1950



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C.A.R.


ANNUAL REPORT ON
NORTHERN RHODESIA
FOR THE YEAR
1950

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PART I

Review of 1950

POLITICAL

During the year, the negotiations which were commenced in 1949 with the British South Africa Company over the Company's mineral rights in Northern Rhodesia culminated in the signing of an agreement in September by which the Company undertook to transfer its mineral rights to the Government of Northern Rhodesia after thirty-seven years. In the meantime the Company would pay the Government 20 per cent. of the net revenue derived from the mineral rights. The agreement was the result of a motion introduced in Legislative Council early in 1949 by Mr. Welensky to tax the Company's royalties. The agreement was signed for the Government of Northern Rhodesia by the Acting Governor in the Legislative Council Chamber on the 14th of September, 1950.

The question of closer association between the Central African territories continued to receive attention. In December it was announced that the Chief Secretary, Mr. R. C. S. Stanley, was to lead the Northern Rhodesia delegation at a "Closer Association" Conference to be held in London between officials of the Central African territories. Giving this information in Legislative Council, Mr. Stanley declared:

"We shall give our earnest and impartial consideration to all aspects of the problem in the hope of making recommendations that will be of real value to the Territory."

ECONOMIC

An outstanding economic development during 1950 was the fact that the Territory reached self-sufficiency in maize. Satisfactory yields were obtained from all parts of the country with the result that the total harvest produced the record crop for sale of 82,758 tons. This compares most favourably with the 1949 harvest of 33,910 tons, although

that crop was partially spoilt by an early-season drought. African producers on the line of rail increased their output from 5,638 tons in 1949 to 37,676 tons in 1950.

It was also a good year for tobacco in both the western and eastern areas, although wet and sunless conditions caused a drop in the figures for the Fort Jameson sales where nearly 3,250,000 lb. was sold last year compared with more than 4,000,000 lb. in 1949. The western area produced a crop of nearly 3,000,000 lb., giving a total production for the Territory of over 6,000,000 lb.

Work on improving the Territory's road communications was continued during 1950 and several miles of trunk roads were given a bituminous surface. There were no major railway developments during the period under review but railway facilities improved in spite of a continuing upward trend in traffic figures and there was less delay in transit than in the previous year. Handling facilities at the principal stations were improved. Compared with 1949 there was a slight increase in the supply of coal to the copper mines but the rate of delivery was still insufficient to meet the demand. The use of wood fuel to feed the main boiler furnaces had to be continued. The congestion which occurred at the port of Beira towards the end of 1949 and continued into 1950 was responsible for considerable delay in the despatch of goods from the port to Northern Rhodesia. Some diversion of traffic was, in consequence, made to South African ports.

The cost of living continued its upward trend, and the allowance granted to Civil Servants of 5 per cent. was raised to 10 per cent. with effect from 1st July.

In spite of the continued shortage of coal, the year was another record one for the mines. The financial return was much higher than in 1949 and towards the end of the year the price paid for copper in the United Kingdom rose to over £200 per ton. This continued prosperity of the mines was again reflected in the general prosperity of the Territory. The total value of all mineral production in 1950 was £48,702,142, an increase of thirty-seven per cent. over the previous year's returns. This increase in value was not accompanied by a corresponding expansion in mineral tonnages and was chiefly the result of the much higher prices paid during 1950.

DEVELOPMENT

The report of the Development Authority to Legislative Council covering the period 1st June, 1948, to December, 1949, stated that by the end of that period the development plan had reached "top gear"

to all intents and purposes. In a review of 1950 the Development Authority stated that events of 1950 had tended to show that the peak rate of development had been reached in present circumstances. Considerable progress was made in all directions and in general the achievements of the year could be viewed with satisfaction.

A further review of the Territory's Ten-year Development Plan became necessary in view of several contributing factors and this review, the first since June, 1948, has now almost been completed. The Development Authority are to consider the draft in 1951 with a view to presenting the review to Legislative Council.

Food Production

Continued progress was made in rendering the Territory self-sufficient in foodstuffs. There was an exceptionally favourable season in 1949-50 and for the first time for many years the maize harvest exceeded the Territory's requirements. The production of other foodstuffs was not similarly expanded, but it is hoped that the balance will be restored by the increased prices now being paid to the farmer for wheat, cattle and ground-nuts. Rice production increased so rapidly in several native areas that comprehensive plans for marketing the crop are now under consideration. African agriculturalists also increased their production of maize, and in the Southern Province in particular a new class of progressive African farmer emerged from what a decade ago were subsistence producers. At the same time the pilot ground-nut scheme in the Mumbwa District made satisfactory progress.

Buildings

Limited labour supplies continued to be the chief restricting factor in the implementation of the Government's housing and capital works programme. In addition, shortages of raw materials held up progress during the year. Building costs continued to rise and a Committee of Inquiry was appointed in 1950 to investigate the position. In May, 1950, the Development Authority proposed the erection of a further 206 housing units at an approximate cost of £575,000 but it subsequently became necessary, owing to the shortage of accommodation for Government servants, to increase the 1950-51 programme to a total of 256 units. These should be completed before the end of 1951.

Under the £1,000,000 African Housing Scheme for local authorities and the £500,000 scheme for African Civil Servants, some 1,900 permanent houses had been handed over by the end of 1950. About 7,000 houses are in course of erection.

With regard to the construction of institutional buildings, such as schools, hospitals, etc., it was decided in June, 1950, to discontinue the practice of issuing a set annual capital works programme and to compile instead a capital works priority list for each Province. The provincial priority lists issued allowed for the undertaking of projects to a total of approximately £450,000.

The Silicosis Bureau building at Kitwe, considered to be of the highest standard of any yet erected in Northern Rhodesia under the development plan, was completed during the year.

Roads

During 1950 the programme of improving the roads to Class I standard was fully launched and by the end of the year work was in progress on all roads included in the Development Fund Estimates for 1950. Four firms of contractors were employed on six contracts and three departmental construction teams were also engaged on this work. With this concentration on Class I and Class II roads in 1950 it was not possible to make any great progress with work on the Class III and Class IV roads. In order to secure a more balanced programme during 1951 more attention will be paid to subsidiary roads. The provision of bituminised main roads through towns will also be continued.

Livingstone Airport

The construction of the new international airport at Livingstone (referred to in Chapter 10) was completed in 1950 and was opened in August.

A schedule of development and welfare schemes initiated or in progress during 1950 is shown in the following table:

DEVELOPMENT SCHEMES INITIATED OR IN PROGRESS DURING 1950

Title of Scheme	No. of Scheme	Total Amount spent up to 31-12-50	Amount from Colonial Development and Welfare Fund	Amount from Northern Rhodesia Development Account
		£	£	£
Health	D847	36,954	26,039	10,915
African Education ...	D894	209,970	209,970	—
Grants—Scouts and Guides Associations	D931	2,050	2,050	—
Agriiculture :				
Research Service (Recurrent)	R416	1,123	562	561
Research Service (Capital)	R416	11,637	11,637	—
Extension Services—Field Operations	D1185	29,100	5,820	23,280
Training for Africans (Recurrent)	D1142	9,800	1,960	7,840
Training for Africans (Capital)	D1142	25,210	25,210	—
Capital Works Extension Services for African Agriculture	D923	41,176	41,176	—
Ecological Survey	R223 } R223A }	2,250	2,250	—
Forestry :				
Forest School	D851	8,245	8,245	—
Capital Works for Forest Development	D1063	23,903	23,903	—
Survey of Timber Resources	D1047	15,996	15,996	—
Visits of Specialist Officers and Training of European Staff	D1062	7,528	7,528	—
Veterinary :	D936	47,445	47,445	—
	D1221	8,225	7,662	563
Game and Tsetse Control :	D595	48,660	48,660	—
Fish Farming	D850	6,725	6,725	—
Tsetse Control (Feira)	D840	18,952	18,952	—
Tsetse Survey Field Research Unit	R343	4,550	2,033	1,517
Fish Farming Development (Capital)	D1325	15,978	15,978	—
Rural Development	D1104	120,797	100,742	20,055
Hydrological Survey of Lukanga Swamps	D1416	2,940	2,940	—
Hydrological Survey of Bangweulu Swamps	D1098 } D1098A } D1098B }	4,745	4,745	—
Rhodes-Livingstone Institute	R31	15,914	15,914	—
Red Locust Control, Abercorn	D522A } D522B }	55,296	55,296	—
Central African Broadcasting Scheme (Capital)	D793	56,402	56,402	—
Central African Broadcasting Scheme (Recurrent)	D793	40,073	20,036	20,037
Central African Film Unit	D891	21,067	21,067	—
Rhodes-Livingstone Institute	R187	5,978	5,978	—
Rhodes-Livingstone Institute	R194	1,740	1,740	—
Publications Bureau	D893 } D903 }	18,712	18,712	—
Geological Survey	D1178	18,114	18,114	—
Rhodes-Livingstone Institute	R370	63,834	63,834	—
Kafue-Chirundu Road	D1194	104,959	104,959	—
Extension to Central African Broadcasting Scheme	D793A	7,125	7,125	—
Sociological Survey—A. L. Epstein	R345	1,640	1,640	—

PART II

Chapter 1 : Population

Table I below gives the population of Europeans, Asiatics, Coloureds and Africans as at Census dates from 1911 to 1946. In Table II, estimates of the European, Asiatic, Coloured and African population are stated as at the middle of each year from 1912 to 1950. The estimate of African population for 1949 must be regarded as provisional. At 30th June, 1950, the European population was estimated as 36,000 and the combined Asiatic and Coloured population as 3,100.

The number of European births, deaths, marriages and statistics of infant mortality shown in Table III, for the period 1938-1949, show that in 1949 there were 867 births compared with 840 in 1948, and 160 deaths compared with 158 in 1948. There were 21 cases of infant mortality in 1949 as compared with 27 in the preceding year.

*Table I.**

POPULATION AT CENSUS DATES

Census Date	Census Results			Population Estimates	
	European	Asiatic	Coloured	Domiciled Indigenous Natives	Total
7th May, 1911 ..	1,497	39	(b)	820,000(a)	821,536
3rd May, 1921 ..	3,634	56	145	980,000	983,835
5th May, 1931 ..	13,846	176	425	1,330,000	1,344,447
15th October, 1946	21,907(c)	1,117	804	1,660,000	1,683,828

(a) Including Coloureds.

(b) Included with natives.

(c) Including 3,181 Polish evacuees in camp.

* The figures given in these tables are taken from the Central African Bulletin of Statistics.

POPULATION

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Table II.

ANNUAL POPULATION ESTIMATES, 1912-1950.

(Based on estimates of the British South Africa Company from 1912 to 1923 and estimates of the Northern Rhodesia Government from 1924 to 1945.)

Year Ended 30th June	European	Asiatic and Coloured	African
1912	1,700	(a)	830,000
1913	2,100	(a)	840,000
1914	2,300	(a)	870,000
1915	2,000	(a)	860,000
1916	2,100	(a)	870,000
1917	2,200	(a)	880,000
1918	2,400	(a)	900,000
1919	2,600	(a)	930,000
1920	3,000	(a)	950,000
1921	3,700	200	980,000
1922	3,700	200	980,000
1923	3,700	300	980,000
1924	4,000	300	1,050,000
1925	4,400	400	1,130,000
1926	5,100	400	1,170,000
1927	6,600	400	1,220,000
1928	7,400	500	1,260,000
1929	8,700	500	1,280,000
1930	11,100	600	1,310,000
1931	13,800	600	1,350,000
1932	11,000	700	1,380,000
1933	10,700	700	1,380,000
1934	11,500	800	1,370,000
1935	10,700	800	1,370,000
1936	10,000	900	1,400,000
1937	11,300	1,000	1,430,000
1938	13,000	1,100	1,450,000
1939	13,100	1,300	1,480,000
1940	14,300	1,400	1,500,000
1941	15,100	1,400	1,530,000
1942	14,800	1,300	1,560,000
1943	18,000	1,600	1,580,000
1944	19,200	1,700	1,610,000
1945	20,800	1,700	1,630,000
1946	21,800	1,900	1,520,000
1947	25,100	2,100	1,550,000
1948	28,800	2,300	1,580,000
1949	32,000	2,800	1,610,000(b)
1950	36,000	3,100	(a)

(a) Not available.

(b) Provisional.

*Table III.*EUROPEAN BIRTHS, DEATHS, MARRIAGES AND
INFANT MORTALITY, 1938-1949.

Year	Births		Marriages	Deaths		Infant Mortality	
	No.	Per 1,000	No.	No.	Per 1,000	No. Per 1,000 Live Births	
1938	355	27.31	137	131	10.08	10	20.47
1939	378	28.85	167	108	8.24	7	18.50
1940	520	36.36	187	108	7.55	15	30.06
1941	490	32.45	157	137	9.07	13	26.53
1942	559	37.77	174	131	8.85	17	30.45
1943	501	27.83	182	136	7.56	17	32.69
1944	586	30.52	169	162	8.44	25	42.68
1945	602	28.93	194	153	7.36*	21	36.65
1946	650	29.81	211	155	7.11	25	38.46
1947	740	29.48	292*	171	6.81	33*	44.59*
1948	840*	29.17*	315*	158	5.56*	27*	32.14*
1949	867	27.09*	265	160*	5.00*	21*	27.68*

* Denotes figures adjusted since 1949 Report.

IMMIGRATION

During 1950, 7,390 immigrants (3,460 males, 2,109 females and 1,821 children) entered the Territory compared with 6,523 immigrants (2,824 males, 2,213 females and 1,496 children) who came to Northern Rhodesia during 1949.

There were 255 Asiatics and 18 Coloured persons among the 7,390 immigrants, and the remaining 7,117 were Europeans, of whom all but 153 were of British nationality. Of the 7,237 immigrants of British nationality 3,978 were born in the Union of South Africa, 2,199 in the British Isles, 348 in Southern Rhodesia, 678 elsewhere, and 34 were naturalised British subjects.

Chapter 2 : Occupations, Wages and Labour Organisation

The estimated average numbers of Africans employed in industry and services in Northern Rhodesia during the year under review were :

Agriculture	32,500
Butcheries	850
Bakeries	380
Brickfields	4,500
Building	14,000
Cordwood Cutting	8,000
Dairies	200
Domestic Service	23,000
Flour Mills	350
Garages	640
*Government (excluding roads)	7,700
Hotels and Catering	1,600
Management Boards and Local Authorities	3,750
Mines	40,000
Quarries and Lime Works	760
Road Work	6,000
Railways	4,300
Saw Mills	3,600
Transport Companies	3,000
Wholesale and Retail Distributive Trades (if not otherwise covered)	4,250

* Casual labour estimated at a further 12,000.

The average monthly basic wage in the mining industry for Europeans exclusive of bonus, cost-of-living and overtime was £48.48 on the surface, and £54.02 underground. This represents little more than half of the total remuneration. Housing was provided at a low rental varying from £3 to £6 per month.

The average monthly basic wage for Africans at the end of the year was £3 2s. 2d. on the surface (compared with £2 18s. 4d. in 1949) and £3 15s. 11d. for underground workers (compared with £3 9s. in 1949). In addition Africans received free rations and housing which may be valued at approximately £2 10s. per month. In the early and latter parts of the year African labour was in adequate supply, but acute shortage was felt during the dry mid-year months. The copper mines, without being seriously embarrassed in their labour requirements, were nearly all short at one time or another.

The cordwood cutting industry particularly felt the labour shortage, and the numbers employed on woodcutting fell steadily during the year, despite the great need of the mines for wood fuel owing to their inability to obtain adequate supplies of coal.

Domestic servants, especially those of quality, were more difficult to obtain than formerly.

In an effort to alleviate the shortage of farm labour the Farmers' Recruiting Organisation was established before the end of the year, with headquarters in Lusaka and a depot at Nakonde, near the border of Tanganyika. A manager has been appointed, buildings for recruits erected at Nakonde and Lusaka, and a licence issued for the recruitment under approved conditions of up to 2,000 alien natives annually in the Northern Province.

Government continued to maintain the Farm Labour Corps in order to safeguard food production. This Corps averaged 1,000 men during the year, and was in constant demand by farmers to whom squads of eighteen men were hired at a charge of 3s. 1½d. per head per day inclusive of rations.

Industrial Relations. The activities of the various African trade unions were more than usual during the year, and whilst certain demands made could have led to strike action, no such action was taken because of the patience and willingness to continue discussions for peaceful settlement displayed by both employers and trade union leaders.

A big step forward in industrial relations was taken by both sides in the building industry in the setting-up of the Joint Industrial Council. This is the first of its kind in the Territory. With the spirit existing between organised employers and organised employees, and the readiness and sincerity of employers to make the fullest use of all machinery in the ventilation of complaints and demands, this industry can face the future with a reasonable degree of confidence.

In 1950 there were seven African trade unions in existence as follows:

- Northern Rhodesia African Railway Workers' Union.
- Northern Rhodesia African Civil Servants' Association.
- Northern Rhodesia African Teachers' Association.
- Northern Rhodesia African Shop Assistants' Trade Union.
- Northern Rhodesia African Drivers' Association.
- Northern Rhodesia African General Workers' Union.
- Northern Rhodesia African Mineworkers' Trade Union.

Central Employment Registry. In June a Central Employment Registry was commenced with an office at the headquarters of the

Department of Labour and Mines, the object being to provide facilities for European youths leaving school, and other Europeans seeking employment to be placed in contact with employers having vacancies. The Registry, unfortunately, was not well supported by employers.

Trade Testing. Trade testing was undertaken by the Department for the first time during 1950. Three trade testers were appointed—two for the building trades and one for the mechanical trades. These are all men who have served regular apprenticeships themselves, and have had wide experience in the various trades which have been scheduled for testing. They are responsible for trade testing Africans who apply for Trade Test Certificates, and for this purpose tour the country widely.

Wage Movements (Africans). The year has been noteworthy for the upward movement of wages in all occupations. This has been due mainly to the demand for labour exceeding the supply, to the ever-increasing cost of living, and to the energetic activities of trade unions. The latter have been particularly active in the mining and building industries, and in commerce.

Wage Movements (Europeans). There was some general increase in European earnings during the year, mainly by way of adjustment to meet increased cost of living.

Hours of Work. In none of the Copperbelt's major industries are the normal hours longer than forty-eight per week, though domestic servants are usually on duty for more than this number. Cordwood probably averaged no more than four hours per day, but the work is strenuous.

A standard forty-eight-hour week was accepted for the building industry, by agreement between the African General Workers' Trade Union and the Master Builders' and Allied Trades Association.

A claim for a shorter working week, that of forty hours, by the mining industry brought about a dispute in the industry, and an ultimate setting-up of a Board of Inquiry which advised against reducing the standard working week below the present forty-eight hours.

Migrant Labour. The flow of labour to Southern Rhodesia remained fairly steady during the year, 9,573 Northern Rhodesia Africans entered Southern Rhodesia, and 9,814 returned to the Territory. The number of Northern Rhodesia Africans in the Union of South Africa at any one time during the year was estimated at 11,000, including the quota of 3,500 Barotse who are recruited by the Witwatersrand Native Labour Association Limited.

Cost of Living. The cost of living rose a further six points during the year, and was more than 50 per cent. above the 1939 level by the end of the year.

Social Security. There is no general scheme of social security benefits in Northern Rhodesia, but the following measures covering a large percentage of the working population may be mentioned :

Aged persons' allowances are granted by the Government to Europeans who have been ordinarily resident in the Territory for fifteen out of twenty years immediately preceding the date of application, provided that the last five years have been spent in the Territory, and the applicant, who must be at least sixty years of age, is resident and domiciled in the Territory.

The allowance for a single person is £150 per annum, but if that person has a private income exceeding £60 per annum, the rate of allowance is reduced by 10s. for each £1 of private income up to £120 per annum, and thereafter by 13s. 4d. for every £1 up to £300 per annum. In the case of married couples who are both eligible to receive an allowance, the private incomes of husband and wife are aggregated and each party is regarded as having a private income of half the aggregate. Thereafter the allowance is payable to each party as for a single person.

The copper mining companies have a long-service and retirement scheme for Africans.

Workmen's Compensation. Workmen of whatever race who are incapacitated by an accident arising out of and in the course of employment are covered by the Workmen's Compensation Ordinance, and entitled to periodical payments, and in case of permanent disablement to a pension or lump sum payment according to the degree of disablement suffered. A workman is defined in the Ordinance as any person whose basic rate of pay does not exceed £1,200 per year.

Factories. During the year 32 new factories, as defined in the Factories Ordinance, were established. The total number of factories in operation at the end of the year was 168.

Legislation. The principal legislation passed in 1950 consisted of the Silicosis Ordinance which replaced the Silicosis (Temporary Arrangements) Ordinance, the Workmen's Compensation (Amendment) Ordinance and the Apprenticeship (Amendment) Ordinance, the scope of which was considerably widened later in the year by the Schedule of Trades being made applicable to all industries and undertakings, including those of Government workshops, also the Employment of Natives (Amendment) Ordinance and the Employment of Young Persons, Women and Children (Amendment) Ordinance.

Geological Survey. For administrative convenience the newly formed Geological Survey, for which funds have been provided from the Colonial Development and Welfare Fund, has been attached to the Department of Labour and Mines. Technical supervision is being provided temporarily by the Chief Geologist of the Department of Water Development and Irrigation, while one geologist operates from headquarters in Lusaka and another from Mazabuka. It is expected that a chief geologist will arrive in the Territory in March, 1951, and an additional field geologist during the early part of 1952.

Chapter 3: Public Finance and Taxation

Northern Rhodesia's total revenue for 1950 of almost £14,000,000 shows an increase of more than £3,250,000 over the 1949 figures, and the comparative statement of revenue for the past six years reflects the steady increase in the prosperity of the Territory. As a result of this rising revenue, the public services have been greatly expanded while other schemes have been assisted by grants from the Colonial Development and Welfare Fund.

CUSTOMS TARIFF

The Customs Tariff of Northern Rhodesia provides for two rates of duty, (i) general rates and (ii) Empire preferential and Congo Basin rates.

Approximately one-third of Northern Rhodesia (the north-eastern portion) lies within the conventional boundaries of the Congo Basin and is subject to the Congo Basin Treaties under which the granting of preferential treatment to goods from any particular country is prohibited. Goods of Empire and foreign origin are admitted into this area at the lower or preferential rates. The Congo Basin area falls outside the scope of the customs agreements mentioned below.

The tariff has remained substantially unchanged since 1938 and it provides for specific rates of duty on practically all foodstuffs and on beer, potable spirits, tobacco, cement, coal and coke, candles, lubricating oils, paraffin, tyres and tubes, matches and blasting compounds. Other articles are subject to *ad valorem* duties on an f.o.b. value basis or are admitted duty free.

In November, 1947, the customs import duties on many important items, notably essential foodstuffs, blankets, carpets, clothing, piece goods, footwear and household requisites, were suspended in an endeavour to provide some relief against the rising cost of living. The special duties on beers, spirits, wines, cigarettes and manufactured tobacco, which were first introduced during the war years, were again re-enacted and remained in force throughout the year.

The customs agreements concluded with the Union of South Africa (1930) and Southern Rhodesia (1933) have in the main remained unchanged. They provide for inter-Government transfers of customs

duties on goods imported into one territory and subsequently removed to the other. Goods of local production or manufacture, with the exception of certain articles which are subject to customs duty at specially rebated rates, are interchanged without restriction and inter-Government payments on an *ad valorem* basis are made.

EXCISE AND STAMP DUTIES

Excise duty is leviable on spirits, sugar, playing-cards, ale, beer and stout, matches and tobacco manufactured in the Territory. An additional excise duty is paid on cigarettes by means of surtax stamps affixed to the containers. This stamp duty is also applied to all imported cigarettes.

NATIVE TAX

The rates of annual tax vary from the lowest level of 6s. in the remotest rural areas to 15s. in the mining districts. The rate was based, in 1938, on the estimated average earning capacity of adult males in each area and not on an individual basis. Since then, despite a rise in the earnings of the average African, no increase in native tax has been made, as it has been decided to provide for increased taxation by levies imposed by the Native Authorities who will thus have larger funds and be able to take on increased responsibilities.

INCOME TAX

Tax is levied for the year of assessment commencing on 1st April on income accruing in, derived from or received in Northern Rhodesia for the year immediately preceding the year of assessment.

Deductions : Individuals.

From total income the following deductions are allowed in arriving at chargeable income :

- (a) Personal deductions.—£500 for married persons and £250 for unmarried persons.
- (b) Deductions for children.—£150 in respect of each child.
- (c) Deduction for dependants.—The amount expended, with a maximum of £100 in respect of any one dependant, and further limited to the amount by which the dependant's income falls short of £250.
- (d) Insurance.—The annual premiums paid in respect of insurance on the lives of the taxpayer, his wife or minor children, or for sickness or accident are limited to one-sixth the difference between total income and £250, and further limited to £150.
- (e) Widows, or others similarly situated, who have custody of and maintain a child, receive the allowances and are taxed at the rates applicable to married persons.

Rates of Tax :

<i>Unmarried :</i>	s.	d.
For every pound of the first £500 . . .	2	0
For every pound of the next £250 . . .	3	0
For every pound of the next £250 . . .	4	0
For every pound of the next £250 . . .	5	0
For every pound of the next £250 . . .	6	0
For every pound of the next £250 . . .	7	0
For every pound in excess of £1,750 . . .	7	6

Married :

For every pound of the first £250 . . .	1	0
For every pound of the next £250 . . .	1	6
For every pound of the next £250 . . .	2	0
For every pound of the next £250 . . .	3	0
For every pound of the next £250 . . .	4	0
For every pound of the next £250 . . .	5	0
For every pound of the next £500 . . .	6	0
For every pound of the next £500 . . .	7	0
For every pound in excess of £2,500 . . .	7	6

The Company rate of tax is 7s. 6d. in the £.

TABLE SHOWING TAX PAYABLE BY INDIVIDUALS.

Income	Unmarried			Married No Children			Married Two Children		
	£	s.	d.	£	s.	d.	£	s.	d.
300	5	0	0	—			—		
400	15	0	0	—			—		
500	25	0	0	—			—		
600	35	0	0	5	0	0	—		
700	45	0	0	10	0	0	—		
800	57	10	0	16	5	0	—		
900	72	10	0	23	15	0	5	0	0
1,000	87	10	0	31	5	0	10	0	0
1,100	107	10	0	41	5	0	16	5	0
1,200	127	10	0	51	5	0	23	15	0
1,300	150	0	0	63	15	0	31	5	0
1,400	175	0	0	78	15	0	41	5	0
1,500	200	0	0	93	15	0	51	5	0
2,000	362	10	0	206	5	0	133	15	0
2,500	550	0	0	356	5	0	266	5	0
3,000	737	10	0	531	5	0	426	5	0

ESTATE DUTY

Rates of estate duty are as follows :

Where the Principal Value of the Estate exceeds £	And does not exceed £	Estate Duty shall be payable at the rate of
2,000	5,000	1 per cent.
5,000	7,500	2 per cent.
7,500	10,000	3 per cent.
10,000	20,000	4 per cent.
20,000	40,000	5 per cent.
40,000	70,000	6 per cent.
70,000	100,000	7 per cent.
100,000	200,000	8 per cent.
200,000	300,000	9 per cent.
300,000		10 per cent.

Where an estate is inherited by a surviving spouse, half the above rates only are charged on the first £10,000.

COMPARATIVE STATEMENT OF REVENUE FOR THE PAST SIX YEARS

Heads of Revenue	1945	1946	1947	1948	1949	1950
	£	£	£	£	£	£
1. Customs	696,831	806,257	863,377	976,725	1,697,913	1,723,677
2. Licences, Taxes, etc.	2,235,386	1,919,022	2,701,437	4,484,652	7,008,211	8,208,288
3. Fees of Court, etc.	95,323	72,055	103,251	340,267	488,881	526,883
4. Post Office	104,724	125,301	142,181	164,124	193,551	207,081
5. Rent from Government Property	14,483	18,898	17,652	22,076	19,711	24,486
6. Interest and Loan Repay- ments	119,893	144,474	172,797	194,772	262,886	351,705
7. Miscellaneous	134,908	172,486	238,558	94,040	168,530	781,358
8. Lusaka Electricity and Water Undertakings	23,975	24,566	26,460	31,059	34,607	44,442
9. Land Sales	6,984	7,012	12,926	9,247	13,467	21,885
10. Advances to Development Fund reimbursed	—	—	—	—	—	169,415
Appropriation from General Revenue Balance	—	—	94,402	—	—	—
Total Recurrent Expenditure	3,432,507	3,290,071	4,373,041	6,316,962	9,887,757	12,059,220
96. Grants under Colonial Deve- lopment and Welfare Ac- count	1,000	72,070	24,287	139,174	208,743	377,998
97. Appropriation from Terri- torial Revenue	—	—	136,804	259,381	487,363	1,535,035
98. Reimbursements from other Governments	—	—	—	—	—	5,354
99. Loan Appropriation	—	—	—	—	—	100
Total Recurrent and Development Expenditure	3,433,507	3,362,141	4,534,132	6,715,517	10,583,863	13,977,707

COMPARATIVE STATEMENT OF EXPENDITURE FOR
THE PAST SIX YEARS

Head of Expenditure	1945	1946	1947	1948	1949	1950
	£	£	£	£	£	£
1. Charges on Account of Public Debt	129,463	131,130	206,921	168,537	168,031	295,241
2. Pensions and Gratuities	116,536	108,033	127,522	136,603	153,376	213,254
3. The Governor	7,885	8,550	13,317	12,528	13,567	13,737
4. Accountant-General	12,317	13,233	16,824	24,462	39,624	40,547
5. Administrator-General, Official Receiver and Custodian of Enemy Property	1,205	1,037	1,846	2,384	3,996	3,395
6. African Administration	62,881	74,025	74,338	93,687	120,968	125,922
7. African Education	149,450	133,232	188,178	277,866	391,148	413,929
8. Agriculture	84,741	60,694	53,530	67,230	92,339	111,546
9. Audit	6,784	8,327	8,170	10,348	14,377	16,284
10. Civil Aviation	—	—	49,171	90,966	97,070	98,129
11. Co-operative Societies	—	—	—	(a)	14,205	21,130
12. Customs	55,879	51,949	61,389	87,189	37,823	42,316
13. European Education	75,289	85,549	119,624	144,086	223,312	311,530
14. Forestry	(b)	(b)	20,399	31,064	120,851	79,971
15. Game and Tsetse Control	29,186	28,186	27,702	33,136	53,092	70,457
16. Health (including Silicosis Medical Bureau)	195,458	205,933	275,459	326,981	421,882	521,868
17. Income Tax	83,738	57,257	278,970	18,871	11,002	12,167
18. Information	14,290	9,648	12,653	17,121	27,438	28,565
19. Judicial	16,340	17,472	22,713	27,443	34,555	38,262
20. Labour and Mines	12,097	13,534	17,993	21,580	49,548	60,015
21. Legal	6,092	6,217	7,763	8,980	10,148	12,368
22. Loans	(c)	(c)	(c)	(c)	346,910	257,887
23. Local Government and African Housing	—	27,167	23,033	38,895	16,610	84,152
24. Lusaka Electricity and Water Undertakings	11,718	24,779	36,536	38,883	48,690	51,748
25. Military	90,006	58,883	51,171	57,041	54,750	250,333
26. Miscellaneous Services	309,659	423,607	748,173	1,332,853	1,895,593	1,984,721
27. Northern Rhodesia Police	86,829	108,518	126,663	194,372	279,374	366,057
28. Posts and Telegraphs	77,976	92,325	116,451	139,172	183,864	278,140
29. Printing and Stationery	21,733	24,774	40,677	61,224	91,395	92,990
30. Prisons	32,048	39,965	42,613	55,406	74,844	79,306
31. Provincial Administration	117,830	145,033	167,408	225,532	288,875	312,728
32. Public Works Department	64,293	73,190	93,711	126,989	250,010	292,373
33. Public Works Recurrent	164,120	209,280	297,936	210,882	430,255	526,865
34. Public Works Extraordinary	201,896	273,621	406,927	631,807	463,135	430,652
35. Secretariat (including Executive and Legislative Councils, Development and Unofficials in charge of Departments)	38,773	49,390	66,541	92,233	124,412	139,475
36. Stores and Transport (including Zambesi River Transport)	57,361	64,704	166,625	445,291	506,105	194,769
37. Subventions	71,512	38,281	174,050	295,019	109,796	30,311
38. Surveys and Land	18,861	24,883	22,232	26,991	40,124	43,531
39. Veterinary	47,006	48,521	56,676	83,209	85,407	110,963
40. Water Development and Irrigation	(d)	(d)	2,423	77,166	99,251	143,520
41. African Labour Corps	17,294	17,874	37,073	48,685	55,144	43,247
42. Emergency Economic Controls	19,653	15,017	14,457	23,727	35,373	45,495
43. Minor Services	—	—	—	—	—	94,123
44. Territorial Appropriations	—	—	—	—	2,250,000	2,207,675
Mines	(e)	(e)	7,004	9,932	(f)	(f)
Native Newspaper	2,631	1,839	(g)	(g)	(g)	(g)
Items not repeated	—	13,858	6,161	—	—	—
Total Recurrent Expenditure	2,541,853	2,789,515	4,289,023	5,816,371	9,828,269	10,591,694
98. Development and Welfare Schemes	1,517	109,273	245,109	392,084	772,188	—
(a) From Colonial Development and Welfare Funds	—	—	—	—	—	269,415
(b) On Northern Rhodesia Development Account	—	—	—	—	—	1,069,505
99. Loan Expenditure	—	—	—	—	—	2,213,311
	2,543,370	2,898,788	4,534,132	6,208,455	10,600,457	14,143,925

(a) Included under "Secretariat". (b) Included under "Agriculture". (c) Included under "Subventions." (d) Included under "Public Works." (e) Included under "Surveys and Land." (f) Included under "Labour and Mines." (g) Included under "Information."

PUBLIC DEBT AS AT 31st DECEMBER, 1950

	£	s.	d.
3½ per cent. Stock 1955-65, issued 1933 . . .	1,097,000	0	0
3 per cent. Stock 1963-65, issued 1949 . . .	3,540,000	0	0
	<u>£4,637,000</u>	<u>0</u>	<u>0</u>

SINKING FUNDS

	£	s.	d.
3½ per cent. Loan 1955-65	336,932	8	1
3 per cent. Loan 1963-65	17,698	7	8
3 per cent. Loan 1963-65 Supplementary . . .	70,908	9	9
	<u>£425,539</u>	<u>5</u>	<u>6</u>

INVESTMENTS: SINKING FUNDS

	£	s.	d.
3½ per cent. Loan 1955-65	336,932	8	1
3 per cent. Loan 1963-65	17,698	7	8
3 per cent. Loan 1963-65 Supplementary . . .	70,908	9	9
	<u>£425,539</u>	<u>5</u>	<u>6</u>

Chapter 4 : Currency and Banking

CURRENCY CIRCULATION

Southern Rhodesia coin and currency notes issued by the Southern Rhodesia Currency Board are the only currency in circulation in Northern Rhodesia.

The actual currency in circulation in any one of the territories of Southern and Northern Rhodesia and Nyasaland cannot be calculated. The nearest estimate that can be made is arrived at by taking currency on issue to each territory and making adjustments for inter-territorial bank transfers advised to the Southern Rhodesia Currency Board by the commercial banks as follows:

On issue 31/12/50		On issue after adjustment for Inter-Territorial Bank Transfers	
£		£	
614,099	Currency notes .	2,049,593	
463,700	Cupro-nickel coin	465,387	
4,150	Bronze coin .	—	
<hr/>		<hr/>	
£1,081,949		£2,514,980	
Less	137,313 Silver coin .		
<hr/>			
£944,636			

Local Currency. There are no local currency or note issues.

United Kingdom Currency. The amount of gold coin in circulation is negligible. Silver coin is gradually being withdrawn, a rough estimate of the silver coin in circulation is £2,000. Bank of England and United Kingdom currency notes are no longer accepted.

Foreign Currency. Foreign currency is not legal tender and is not issued.

Other Territories.

- (i) A certain amount of East African Currency Board notes and coin imported by Africans is accepted by Government and is exchanged at par for Southern Rhodesia notes and coin collected in Tanganyika.

- (ii) Silver coin of the Union of South Africa is accepted by Government from Africans and repatriated at Government expense.
- (iii) Belgian Congo notes and coin are accepted from Africans in the Northern Province and repatriated.

Commercial Banks. The Standard Bank of South Africa Ltd. and Barclays Bank (Dominion, Colonial and Overseas) have not issued currency notes since 1940 and there are now very few in circulation.

BANKING

Barclays Bank (Dominion, Colonial and Overseas), with ten branches and one agency, and the Standard Bank of South Africa Limited, with ten branches, conduct the banking business of Northern Rhodesia.

There is no land bank, but a Land Board financed by Government makes long and short term loans to farmers against various forms of security. A select committee recommended that a land bank should be formed at the earliest possible date and this recommendation has been accepted by the Legislature.

The Barclays Overseas Development Corporation and the Standard Bank Finance and Development Corporation, subsidiaries of Barclays Bank (Dominion, Colonial and Overseas) and the Standard Bank of South Africa Limited respectively, provide finance of a medium or long term character for purposes of agricultural and industrial development and loans to local government bodies of a type which a commercial bank cannot be expected to undertake.

The formation of an industrial loans board to be financed by Government and to be entitled "Northern Rhodesia Industrial Loans Board" has been approved. Its objects are to assist industry, except the farming section, with capital for varying purposes of development where other existing means of assistance are not available on reasonable terms and for such time as may be necessary to achieve the object for which the aid has been given. Loans will be made against varying types of security.

The First Northern Rhodesia Permanent Building Society commenced operations in the sphere normal to building societies which includes the acceptance of money for savings bank and fixed deposits. Government has contributed to the share capital and has two representatives on the Board.

POST OFFICE SAVINGS BANK

The number of branches remained at 43. In the previous report Chingola Mine, Kitwe Mine and Mufulira Mine were quoted as new branches, whereas the names merely referred to separate deposit book series.

Savings bank facilities were extended to Katete in September but were withdrawn later owing to difficulties experienced in the disposal of cash.

New accounts opened totalled 6,031, and 1,960 accounts were closed, increasing the number of depositors from 22,721 to 26,792.

Transactions for the year compared with those for 1949 are given below:

Deposits			1949	1950
Number	.	.	33,955	47,012
Amount	.	.	£400,637	£492,507
Withdrawals				
Number	.	.	21,411	24,523
Amount	.	.	£250,997	£325,677

The balance due to depositors at the 31st December, 1950, was £867,692 as against £683,250 at the end of 1949.

War Savings Certificates. Repayments during 1950 were 10,365 units of £7,773 15s. 0d. face value, the interest added being £1,684 15s. 6d.

Chapter 5 : Commerce

Northern Rhodesia has been favoured by a succession of good years, and both imports and exports established new records in 1950. The favourable trade balance reached the high figure of over £23,000,000 compared with nearly £13,000,000 in 1948 and £12,000,000 in 1949.

As a result of intensified internal economic activity, imports have risen very rapidly and reached the record figure of over £26,500,000 in the year under review against the £21,250,000 in 1949.

Exports increased at an even faster rate and in 1950 reached nearly £50,000,000, a gain of nearly £17,000,000 on the 1949 figures. Copper in its various forms accounted for about 86 per cent. of total exports in 1950.

Of the thirteen main groups into which imports are classified, metals, metal manufactures, machinery and vehicles recorded the greatest increase, the value rising from £8,430,694 in 1949 to £12,261,774 in 1950. The increase was distributed over almost every commodity in this group but was most marked in purchases of machinery, total imports of which reached £6,100,000 in 1950.

Imports of fibres, yarns, textiles and apparel, valued at £3,975,500 in 1950, were slightly higher than the 1949 figure, with cotton piece goods, the largest single item in this group, accounting for £1,241,000.

There was a slight decline in imports of foodstuffs from £2,123,494 in the peak year 1949 to £1,955,620 in the year under review. Included in the 1950 total was sugar valued at £285,000, condensed and desiccated milk valued at £193,000 and wheat valued at £188,000.

In the class oils, waxes, resins, paints and varnish which totalled £1,381,534, petrol and aviation spirit accounted for £313,000.

The value of minerals, earthenware and glassware reached £1,424,031 in 1950, due mainly to larger imports of coal and cement.

The value of imports from British countries increased from 81 per cent. in 1949 to 86 per cent. in 1950, due largely to a rise in imports from the United Kingdom and, to a lesser extent, from the

Union of South Africa. Imports from the United Kingdom rose by over 45 per cent. to more than £10,500,000, while the value of goods supplied by South Africa jumped from £5,500,000 to £7,250,000. Both countries supply a wide range of commodities but the main purchases from the United Kingdom were machinery (£3,447,000), cotton piece goods (£932,000) and motor vehicles (£575,000), while the largest items from South Africa were machinery (£1,535,000), clothing (£484,000), blasting compounds (£469,000), motor vehicles (£453,000) and cattle for slaughter (£332,000).

Although imports from Southern Rhodesia advanced in value from nearly £3,000,000 in 1949 to nearly £3,500,000 in 1950, her share of the total import trade declined slightly from 14.1 per cent. to 12.9 per cent. As a result of the establishment of a wheat milling industry in Northern Rhodesia there was a marked decrease in imports of wheaten flour from Southern Rhodesia from £206,000 in 1949 to £15,000 in 1950. Nevertheless, Southern Rhodesia continued to supply substantial quantities of coal (714,000 short tons valued at £326,000 in 1950), refined sugar (£274,000) and clothing (£217,000).

Purchases from Australia, mainly wheat and grain, rose from £151,711 in 1949 to £358,253 in 1950, while imports from India also showed an increase (£450,258 as against £311,381 in 1949) due to increased purchases at enhanced prices of cotton piece goods, total imports of which reached £198,000, and textile bags valued at £115,000.

Purchases from Canada, the only important British supplier to record a decrease of any magnitude, fell from £579,529 in 1949 to £382,465 in 1950, due mainly to a decrease in shipments of timber and motor vehicles.

The United States remained the principal foreign source of supply and sent goods to the value of just under £2,000,000, the chief imports being mining machinery (£418,000), other machinery (£400,000), clothing (£191,000) and lubricating oil (£141,000).

Imports from the Belgian Congo fell from £574,007 in 1949 to £267,726 last year, purchases consisting mainly of cassava meal and palm and palm kernel oil.

Although the total value of domestic exports to British countries increased by over £7,000,000 to £31,347,799 in 1950, the Empire's share of the total trade declined appreciably from 73.6 per cent. in 1949 to 63.6 per cent. last year. The United Kingdom remained Northern Rhodesia's best customer and took goods to the value of nearly £24,000,000 in 1950 as against £18,500,000 in 1949. Exports to the United Kingdom consisted almost entirely of copper, lead, cobalt alloy, tobacco and vanadic oxide.

Consignments to the Union of South Africa rose from £2,901,772 in 1949 to £4,510,151 in 1950, the goods purchased being mainly zinc, copper and lead.

India increased her purchases by taking more zinc and blister copper and bought goods to the value of £1,430,477.

Excluding exports of unmanufactured tobacco to Southern Rhodesia, the bulk of which was sold on the auction floors in that territory and re-exported, Northern Rhodesia marketed goods to the value of £467,000 to her southern neighbour, as against £327,000 in 1949. This trade was chiefly in cattle hides and wooden railway sleepers.

Due to smaller shipments of blister copper, Northern Rhodesia's exports to Australia dropped to £309,136 in 1950 as against nearly £1,000,000 in the previous year.

A marked feature of Northern Rhodesia's export trade last year was the substantial increase in shipments of copper blister to the United States and the German Federal Republic, which resulted in total exports to the former country rising by nearly £6,000,000 to the record figure of £10,800,000 and to the German Federal Republic from only £116,000 in 1949 to £2,250,000 last year.

The value of exports to Sweden rose from £1,757,223 in 1949 to £2,364,829 in 1950 and consisted almost entirely of copper electrolytic wire bars, while Belgium took £1,735,359 (copper blister and copper slimes) in 1950 as against £1,207,497 in 1949.

Exports of blister copper in 1950 represented 63 per cent. of all Northern Rhodesia's exports of domestic produce, the total consigned from the Colony amounting to 243,579 short tons valued at £31,587,537 as compared with 202,457 short tons, worth £20,863,015, in 1949. Consignments to the United States increased substantially from nearly 50,000 short tons valued at £4,800,000 in 1949 to nearly 81,000 short tons worth £10,800,000 last year. The quantity shipped to the United Kingdom, the largest purchaser, rose slightly from 124,733 short tons to 126,350 short tons, but the value increased by nearly £2,700,000 to £16,159,400 in 1950. Other buyers of any magnitude last year were the German Federal Republic, Belgium, India and Australia. Exports to France were nil last year as against 1,700 tons valued at £153,000 in 1949.

Exports of copper (electrolytic and wire bars) moved up from 60,950 tons, worth £6,037,622, in 1949 to nearly 70,000 tons valued at over £9,500,000 in 1950. The United Kingdom (£5,336,161),

Sweden (£2,364,711), the Union of South Africa (£1,620,705) and Denmark (£267,640) took practically all the copper exported in this form.

Although less zinc was exported in 1950 than in the previous year, 507,915 centals as against 508,567, the 1950 total was worth considerably more, £2,630,553 compared with £1,931,279. These exports were widely distributed, the heaviest purchasers last year being the Union of South Africa (£1,701,102) and India (£753,981). Other large buyers of zinc were the Netherlands, Italy and Southern Rhodesia.

Although the quantity of tobacco exported in 1950 showed little change, 6,300,000 lb. as against 6,100,000 lb. in 1949, the value rose by nearly £250,000 to just over £1,000,000 last year. Southern Rhodesia and the United Kingdom took most of these exports.

CO-OPERATIVE SOCIETIES

The year 1950 has been one of consolidation rather than expansion. In 1949 the number of African societies in the Territory was doubled, and, as was only to be expected, the field staff of the Department was fully engaged during 1950 in nursing the new societies, with the result that total new registrations only numbered twelve societies. There was, however, a satisfactory increase in membership, share capital and turnover.

Emphasis is laid on improved marketing services and increased volume of produce through Producers' Marketing Societies, and 1950 saw a beginning of what might prove to be an important expansion in the production of rice and cotton in the Territory. Practically all rice and all cotton marketed by native growers in the Territory is done so co-operatively, and in 1950 the amount of rice marketed rose from just over 50 tons in 1949 to 273 tons in 1950, while seed cotton rose from 7,800 lb. to 31,000 lb. in the same period.

The following tables illustrate the number of societies registered under the two main types, membership, paid-up share capital and turnover since the department was set up in 1947:

CONSUMER AND SUPPLY SOCIETIES

European

Year	No. of Societies	Membership	Share Capital Paid up	Turnover
			£	£
1947	—	—	—	—
1948	5	1,405	53,827	24,349
1949	6	2,143	72,419	96,316
1950	6	3,081	123,486	310,324

African

Year	No. of Societies	Membership	Share Capital Paid up	Turnover
			£	£
1947	—	—	—	—
1948	10	1,118	1,350	9,343
1949	17	2,915	3,420	30,304
1950	20	3,716	5,973	39,395

PRODUCERS' MARKETING AND PROCESSING SOCIETIES

European

Year	No. of Societies	Membership	Share Capital Paid up	Turnover
			£	£
1947	6	760	20,201	Not known
1948	5	845	35,328	1,070,727
1949	5	979	54,350	655,693
1950	5	1,052	64,785	852,724

The decrease in the number of societies between 1947 and 1948 was due to the amalgamation of the Northern Rhodesia Tobacco Co-operative Society, Limited and the Northern Rhodesia Turkish Tobacco Co-operative Society, Limited.

African

Year	No. of Societies	Membership	Share Capital Paid up	Turnover
			£	£
1947	—	—	—	—
1948	7	3,558	1,600	30,350
1949	24	4,748	2,780	22,958
1950	34	6,285	6,566	71,149

Short and medium term agricultural credit is provided through the marketing societies.

An important function of primary producer co-operative societies, and one on which stress has been laid from the beginning, has been the supply of essential goods, especially farming implements, such as hoes, harrows, mould-board ploughs, cultivators, etc. A start has this year been made by secondary marketing societies in obtaining machinery for processing members' crops. Power-driven ground-nut shellers are being installed in the main producing areas. A suitable large sheller of South African manufacture has been found, but inquiries are still in hand to discover an efficient small sheller for

location out in the village areas. Transport being a serious problem, practical and financial, the nearer to the producers that shelling can be done, the better. In addition to ground-nut machinery, three types of combined huller and polisher are in use or are being imported for the rice crops. So far, the machines being used are of a small type of a capacity of 80 to 650 lb. per hour, and should be sufficient for the present scale of the rice industry. It is hoped, however, that in another five years or so, the Territorial production of rice will have risen to a figure that will justify investment in larger machinery.

PRICE CONTROL

During the year 1950, the Department of Price Control, which has now a full establishment of experienced officers, continued its activities. Prices of consumer goods, particularly all types of food-stuffs (with the exception of luxuries), clothing, footwear and general household necessities have been kept under rigid control. The official cost-of-living index figure has been kept within reasonable limits when comparison is made with surrounding territories.

Practically the whole of the Territory has been toured by the Department's officers during the year, and continuous inspection has been carried out in all the larger towns on the railway line and the Copperbelt.

It was hoped that a gradual relaxation of control would have been possible, but due to continuous shortages and rising prices of consumer goods, it has been found necessary to continue the activities of the Department in the year 1951.

COMPANY REGISTRATIONS

There were 51 new registrations of local companies in 1950, for a total capital of £827,600, as compared with 48 companies for a total capital of £2,100,200 in 1949. Fourteen existing companies increased their capital in 1950, the total increase being £454,784 (the corresponding figures the previous year were twelve and £368,755). Three local companies went into voluntary liquidation in 1950, and 5 were struck off by the Registrar as no longer carrying on business. Foreign companies registered during the year numbered 28, as against 10 in 1949.

Local companies registered during 1950 were as follows: commerce and finance, twenty-one companies, £346,600; secondary industry, twenty companies, £200,000, agriculture, three companies, £54,000; transport, three companies, £44,000; personal service, one company, £200,000; others, three companies, £13,000.

MORTGAGES, BILLS OF SALE AND INSOLVENCIES

During the year there were 313 mortgages registered for £898,895, as against 215 mortgages, £815,939, in 1949.

There were nine Bills of Sale valued at £21,836 registered during 1950 as against nine Bills valued at £8,410 in 1949.

Fourteen persons were adjudicated bankrupt in 1950 compared with only six during the previous year.

Chapter 6 : Production

AGRICULTURE

The season was a favourable one for maize production and satisfactory yields were obtained in all parts of the maize belts. The average yield on European farms was 1,100 lb. per acre. European farmers sold 45,082 tons of maize to the Maize Control Board and retained 12,100 tons for consumption on farms. The total acreage planted on European farms was 105,000 acres. African maize growers in the "controlled area" of the maize belt marketed 37,676 tons of maize. The price of European grown maize delivered to the Maize Control Board's depots on the railway line was £1 10s. 2d. per bag of 200 lb. plus the cost of the bag. African growers received a flat price of £1 1s. 3d. per bag at all buying stations in the "controlled area" irrespective of distance from the railway line. From the difference between this and £1 10s. 2d. transport and purchasing costs were met and the balance credited to an African Farming Improvement Fund.

MAIZE PRODUCTION FOR SALE

(Tons of 2,000 lb.)

Year	European	African	Total
1945 . . .	27,300	20,200	47,500
1946 . . .	26,800	17,200	44,000
1947 . . .	19,000	5,400	24,400
1948 . . .	34,300	29,600	63,900
1949 . . .	28,272	5,638	33,910
1950 . . .	45,082	37,676	82,758

(1949 figures adjusted since 1949 Report.)

This table illustrates the relative stability of European maize production, which is organised on the basis of a fairly large acreage per farm and takes place for the most part on soils well suited to maize production. The production from the native areas, which represents the surpluses of a large number of small growers whose primary aim in production is to feed themselves and their families, and which is not confined to the most suitable soils, is naturally much more sensitive to seasonal variations.

The production is consumed internally mainly in the mining areas. Consumption of maize in industries and townships on the railway line was 72,145 tons.

Wheat production under irrigation mainly in the Lusaka district remains at a very low level. The slight increase in 1950 production is due more to a favourable season than to a renewed interest in the crop. Potato and vegetable growing is more remunerative than wheat growing. Production in 1950 was 325 tons. The decline in wheat growing is shown in the following table:

WHEAT PRODUCTION FOR SALE
(Tons of 2,000 lb.)

1945	.	.	.	.	.	2,550
1946	.	.	.	.	.	2,475
1947	.	.	.	.	.	500
1948	.	.	.	.	.	900
1949	.	.	.	.	.	150
1950	.	.	.	.	.	325

The consumption of wheat in the Territory in 1950 was 11,000 tons, all of which was imported as grain and milled in the Territory. The price of wheat paid to growers is £2 16s. 0d. per 200 lb.

The year 1950 was also a fairly good year for tobacco in both eastern and western areas, although in the eastern area the season was rather wet and sunless. The production of Virginia flue-cured tobacco in the eastern area was 3,214,500 lb. and in the western area 2,956,000 lb. —all by European farmers. The average price for this tobacco was 40.453 pence per lb. in the eastern area and 39.26 pence per lb. in the western area. The expansion which has taken place during the past six years is shown in the following table:

TOBACCO PRODUCTION
(Virginia Flue-cured Leaf)

		Eastern	Western	Total
1945	.	2,207,000 lb.	243,000 lb.	2,450,000 lb.
1946	.	2,823,000 lb.	307,000 lb.	3,130,000 lb.
1947	.	2,928,000 lb.	500,000 lb.	3,428,000 lb.
1948	.	2,938,000 lb.	781,000 lb.	3,769,000 lb.
1949	.	4,076,000 lb.	1,691,000 lb.	5,767,000 lb.
1950	.	3,214,500 lb.	2,956,000 lb.	6,170,500 lb.

Turkish tobacco production by European farmers in the eastern tobacco area remained at the low figure of 115,000 lb.

Burley tobacco production by African growers in the Eastern Province is developing into a flourishing industry organised on co-operative lines. Production in 1950 was 327,100 lb. sold at an average price of 26.694 pence per lb. All the above tobacco production is exported.

Minor agricultural products of the country are kaffir-corn (sorghum), finger millet (eleusine), ground-nuts, cassava, rice and a

variety of beans and cowpeas, most of which are produced by African growers, and small quantities are marketed annually for local consumption.

A small cotton-growing industry is developing among Africans in the Luangwa Valley in the Eastern Province. Production in 1950 was 31,000 lb. seed cotton. Production in 1949 was 7,800 lb. and a much larger crop is expected in 1951.

ANIMAL HEALTH AND PRODUCTION

The year 1950 can be regarded as a very satisfactory year for the livestock industry. Good general rains occurred and climatic conditions were favourable. Local deliveries of slaughter cattle provided only 50 per cent. of the territorial demand, and to maintain beef supplies adequate for normal consumption considerable importations of slaughter cattle from Bechuanaland were effected. Although trade was temporarily suspended due to an outbreak of foot and mouth disease in Bechuanaland, sufficient stock were on hand at the time to avoid rationing of beef. To assist beef production in the Territory a considerable number of breeding stock were imported for distribution. Of these, 2,000 head of young heifers were imported from Southern Rhodesia for distribution in the Central and Southern Provinces, and 750 head of young heifers were imported from Tanganyika for distribution in the Northern Province.

Milk production showed some increase, and the supply of eggs suffered only temporary seasonal shortage. The Co-operative Creameries planned an extension of operations and a factory commenced construction at Mazabuka to assist the handling and distribution of milk throughout the Territory.

Interest in development of ranching by European ranchers was maintained, but the shortage of good labour, especially reliable herd boys, was noticeable. A large number of saleyards in African areas were constructed and weighbridges installed at each to provide facilities for the sale of native cattle by weight and grade.

The general standard of animal health was satisfactorily maintained. No serious epidemics occurred during the year and the more serious common endemic diseases, e.g. trypanosomiasis, anthrax and quarter evil, were prevented by large scale inoculation measures. An outbreak of foot and mouth disease in the Namwala District was brought rapidly under control within two months by the inoculation of 40,000 head of cattle, and the disease did not spread outside the infected area. Moreover, opportunity was taken to pursue observations in production of a vaccine to combat foot and mouth disease. East

Coast fever restrictions were removed from the infected area of the Eastern Province and occurred less frequently in the Northern Province, where it is kept under control by dipping. Outbreaks of rabies showed a decrease compared with previous years, and approximately 8,000 dogs were vaccinated against this disease. Contagious epididymitis and vaginitis were discovered in two dairy herds and one ranch herd and the necessary control measures were instituted. The occurrence of tuberculosis, although regarded as very small, tended to show some slight increase.

The preliminary course at the African Veterinary Assistants School was not undertaken during the year as extensive repairs to the school buildings were required, but an advanced course was given to eleven African Veterinary Assistants.

FACTORIES

Greatest factory production in Northern Rhodesia is saw-milling and woodworking. Organisations range from that of the Zambesi Saw Mills, Limited, by far the largest factory in the Territory, to an individual European employing a few Africans. Other big company activities were the workshops and running sheds of the Rhodesia Railways Limited, and the production of oxygen and dissolved acetylene by a local subsidiary of the British Oxygen Company, Limited. Two other large factories are the Government-controlled Cold Storage Control Board and the Northern Rhodesia Tobacco Co-operative Society Limited. An iron foundry and textile factory were opened up at Livingstone. Otherwise production was mostly by small factories owned by individuals, syndicates or companies. The demand for building materials has resulted in the establishment of concerns producing bricks and ferro-concrete products, such as pipes, on a considerable scale. Apart from such items as hardwood railway sleepers, exported by the Zambesi Saw Mills, Limited, tobacco and some parquet flooring, plywood and veneer, factory production in 1950 was almost entirely for local consumption.

FISH

Statistics of fish production are not yet available, though it may be said that fishing is a leading industry for the Africans and forms the basis of the economy of large parts of the Territory, particularly in the Bangweulu, Luapula and Mweru areas, where the Department of Game and Tsetse Control continued its investigation and conservation work.

Northern Fisheries Limited, the only firm so far directly concerned with the Territory's fisheries, continued its operations on Lake Tanganyika. In other parts fishing, chiefly in the Mweru, Luapula, Bangweulu,

Kafue and Zambezi regions, is in the hands of individual Africans dealing chiefly in the dried fish trade to line-of-rail centres. A start has, however, been made in introducing the co-operative movement to these fishermen, and there are good hopes of progress.

Experiments in fish farming have indicated that a yield of some 1,000 lb. of *Tilapia* an acre per annum, without feeding the fish or fertilising the water, is quite practicable. This finding confirms fish-farming as an economic proposition, it being already proved in the Belgian Congo that, with feeding, yields up to 4,000 lb. an acre per annum are readily obtainable.

A Colonial Development and Welfare grant was received during the year for a Joint Northern Rhodesia and Nyasaland Fisheries Research Organisation to be established, with headquarters at Samfya, Lake Bangweulu, and a substation on Lake Nyasa. The organisation will conduct research into every aspect of fish biology and economics in the natural waters of the Territory, as well as experimenting in production by fish-farming methods in controlled waters. Start of the scheme was held up pending recruitment of scientific staff.

FORESTRY

Although woodland covers about 40 per cent. of Northern Rhodesia's total area of 290,000 square miles, the exploitable resources of the Territory in timber are comparatively small.

The Forest Department has three short-term objectives. The first is to steer the extensive cutting of wood for the Territory's industries in such a way that it does the least damage to the rather scanty resources. Good progress in this has been made in 1950: it may be said that all industrial cutting is now satisfactorily under control. The Department's next duty is to select and establish sufficient forest reserves to meet the Territory's needs. The area of gazetted forest reserves in Northern Rhodesia is pitifully small; official additions to the gazetted list in 1950 were small, too, but over forty large reserves and protected forest areas had been proposed and were under investigation at the end of the year. These will still, however, not be enough for the Territory's requirements. The Department's third duty—to regenerate and plant for the future—made some progress; nevertheless regeneration lagged behind the rate of cut.

During 1950 there was an increase in the Department's European technical staff, and also an increase in the numbers and efficiency of the African staff, produced from the Department's newly started African training school. There was a rise of 46 per cent. in the number of saw logs sold to the copper mines, in addition to their continued cutting of fuelwood on an enormous scale (822,428 tons). A long-needed working

plan for the Rhodesian teak forests was compiled, and the reconnaissance and enumeration of 2,734 square miles of timber-bearing woodland were undertaken by the Timber Survey Unit.

Progress was made with the heavy programme of buildings and capital works, notably in the Rhodesian teak forests.

During the year two new reserves were gazetted, Choma Forest Reserve with an area of 4,200 acres, and Magoye Forest Reserve with an area of 11,970 acres. At the end of the year the area of gazetted forest reserves totalled 1,477 square miles, or 0.5 per cent. of the total area of the Territory.

Adjustments to boundaries of existing reserves, and proposals for fresh forest reserves, involved areas totalling over 3,500 square miles. There were delays in getting these reserves sanctioned and gazetted. They lay in trust land (trust land and native reserve embraces 94 per cent. of the whole Territory), and there were objections that any trust land should be nationalised for forestry purposes.

The Mwekera Protected Forest Area, a well-timbered mining grant of 5,120 acres, was gazetted. Protected forest areas at the end of the year occupied 278 square miles or 0.09 per cent. of the total area of the Territory.

In Barotseland, closer definition and recomputation of boundaries of Rhodesian teak forests in Sesheke District show that the areas of forest protected under Barotse Forest Orders total 843.7 square miles in that district alone. In the Mongu, Senanga and Kalabo districts many of the numerous undefined forests of the Paramount Chief were re-examined, and a programme started of having them scheduled and surveyed. They cover roughly 1,300 square miles. One, Watembo Forest, in extent forty-six square miles, was properly demarcated by the end of the year.

The Territory's timber imports in 1950 cost considerably more than £750,000. There were no remarkable changes from previous years. Softwoods—pine and Douglas fir—continued to be imported as far as was indispensable. Most came from Canada. The Congo supplied nearly 64,000 cubic feet of hardwood, which was used for mining and joinery. The importation of £80,000 worth of joinery shows that the works at Livingstone and Ndola still do not produce enough for the needs. The same is true of £200,000 worth of furniture. Exports were mainly "Rhodesian teak"; no railway sleepers of this timber were sent to South Africa. The most notable development during the year was the revival of the pre-war "Rhodesian teak" flooring trade with the United Kingdom to which 33,000 cubic feet of strip flooring was sent by Zambesi Saw Mills. Exports of rough logs and poles for

mining, from Solwezi District to Union Minière (Kipushi Mine), ceased in the middle of the year.

The total expenditure in 1950 was £127,814, nearly 56 per cent. more than in 1949, but nevertheless still below the total revenue collected over the same period.

MINES

The weight and value of the minerals produced during the year were as follows:

Mineral	Weight	Value £
Gold	1,432 oz.	17,436
Silver	173,304 oz.	43,258
Cobalt alloy (37.74 per cent. Co)	34,914 cwt.	1,096,337
Copper (blister)	198,760 tons	30,678,420
Copper concentrates (20.8 per cent Cu)	259 tons	8,695
Copper (electrolytic)	76,804 tons	12,578,089
Copper (other)	30 tons	5,588
Lead	13,685 tons	1,457,754*
Manganese ore (13.41 per cent. Mn)	1,723 tons	2,585
Selenium	27,056 lb.	21,645
Tin concentrates (72 per cent. Sn*)	5.40 tons*	2,068*
Zinc	22,715 tons	2,740,588
Limestone	107,160 tons	48,221
Mica	4,395 lb.*	1,094*
Silica rock	165 tons	52
Beryl	4.46 tons	312*
Total		£48,702,142*

* Subject to adjustment.

The total value of minerals produced in the Territory up to the 31st December, 1950, was, subject to final adjustment, £296,345,254.

All the mineral production, except the tin concentrates, beryl and mica and some of the gold and limestone, was by five large mining companies. No gold, silver, cobalt or selenium mining company operated as such, but those metals were recovered as by-products from one of the copper mines. The manganese ore was used by the producer for metallurgical purposes, and most of the copper concentrates were purchased locally for a similar purpose, though a little was used as a fungicide; some of the lead was used by the producer for debasing zinc, some of it was fabricated into pipes and sheets for use at the mine and at some of the copper mines, and a little of it, as also an insignificant quantity of the cobalt, copper and zinc, was sold outside the Territory. Some lime was exported but most of the limestone was used as a flux in copper smelting. Otherwise the minerals produced were exported to various parts of the world.

Chapter 7 : Social Services

EDUCATION

European Education.

European education is provided by twenty-three Government schools (including one Government aided) and eight private schools. The Government schools are co-educational with the following exceptions: at Lusaka there are separate schools for boys and girls; at Choma boys, and at Mazabuka girls, are not accepted as boarders. Hostels for boarders exist at Choma, Mazabuka and Lusaka, centres of widely scattered farming areas. At Lusaka and the mine townships, the schools provide primary education and secondary education up to Form III. In the mine townships separate infants' schools have been organised. Livingstone and Ndola cover education up to Form II. At other centres Standard II is the highest class in single teacher schools and Standard V in others. Tuition at Government schools is free and remission of hostel fees is granted in relation to the parents' means.

Seven of the eight privately managed schools are convent schools at Livingstone, Lusaka, Broken Hill, Luanshya, Ndola, Kitwe and Chingola. Sakeji private school (Government aided), in the far north-west corner of the Territory, serves a small European farming and missionary community. This school and the convents at Lusaka, Broken Hill and Ndola take boarders. At the Lusaka Convent School, girls can receive education up to Cambridge School Certificate standard.

All the convent schools are primarily for girls, but take a limited number of small boys. Sakeji School is co-educational.

Secondary education for Northern Rhodesian children above Form III is mainly obtained in the schools of Southern Rhodesia and South Africa, the expense to parents being partly met by Government grants and railway concessions. During 1947, Government took the important decision to provide the full range of academic and modern secondary education within the Territory as soon as possible, and the full range is expected to be available in the Territory by January, 1953.

No university or teacher-training facilities exist in Northern Rhodesia, but bursaries, scholarships and loans are available to enable students to obtain such facilities elsewhere. The only adult education

provided by Government is in the technical classes for apprentices at five mining centres of the Territory. Commercial subjects are taught in some of the private schools.

Eurafrican and Asiatic education is the responsibility of the European Education Department. There is one Eurafrican school at Fort Jameson with a hostel, and assistance is given to enable Eurafrican children who cannot attend that school to attend schools outside the Territory. Similar assistance is given to Indian children who are unable to attend one of the four " aided " Indian schools in the country.

The following figures show the increase in the number of European scholars enrolled in schools :

		Government Schools	Private Schools	Total
1938	. .	1,048	200	1,248
1948	. .	3,147	886	4,033
1949	. .	3,759	1,052	4,811
1950	. .	4,748	1,141	5,889

African Education.

The total child population of school age is estimated at about 330,000 as compared with the figure of 312,000 given in the 1948 report. This revised estimate is based upon the 1946 census of population report which was published in 1949. The number of maintained and aided primary schools last year was 1,350 and the enrolment approximately 143,404; of this total, 97,068 were boys and 46,336 were girls. The average attendance was 83 per cent.

Of the schools maintained or aided by Government 1,246 were mission controlled; 73 were Government schools and 31 were Native Authority schools.

Estimated expenditure rose from £378,000 in 1949 to £445,002 in 1950. In addition a capital expenditure of £181,446 was provided for in 1950.

The number of unaided but inspected schools increased from 331 in 1948-49 to 362 in 1949-50 and the enrolment from 19,300 to 20,200. It is estimated that about 49 per cent. of the children of school age are attending school, of which 43 per cent. are in aided or maintained schools.

The full primary school course in Northern Rhodesia is one of nine years. A four-year elementary course is followed by a middle-school course for Standards III and IV and then by an upper-school course of three years at the end of which the Standard VI school leaving certificate is taken. The course allows for one third of the

time to be spent on training in practical subjects such as agriculture, building, carpentry and community service. Very few children complete the full course at present. In 1949-50 there were nearly 125,000 children in the elementary schools, 13,200 in the middle schools and 3,870 in the upper schools.

In May, 1950, 685 boys and 51 girls passed the Standard VI school leaving certificate which is the entrance qualification to vocational training with Government departments and to the elementary school teachers' certificate and the Munali Trades School.

The Munali Training Centre, a Government institution at Lusaka, is the only school providing a full secondary academic education for Africans, but during the year a new junior secondary school was opened at Mapanza under the ægis of the Universities Mission to Central Africa. The enrolment at Munali was 187 in the 1949-50 school year and of these 54 were in the senior secondary school. In addition there were 49 boys and 12 girls at the three other junior secondary schools, two of which are controlled by missions. Building of the new African secondary school, some five miles east of Lusaka is still in progress.

There are no facilities within the Territory for post-secondary education. Nineteen students are attending courses in South African institutions with the aid of Government bursaries and two others are at Makerere College. Twelve students are taking courses in the United Kingdom and eight are financed from Colonial Development and Welfare funds.

During the year 715 teachers were being trained as junior or elementary teachers and 95 were taking higher teachers' courses.

Trades courses in carpentry and building, and in thatching, leather-working and tailoring were continued at the Munali Training Centre. Lukashya Training School in the Northern Province had 78 ex-askari in training, 26 of whom completed their two-year course in December. Junior trade schools, giving a three-year course in carpentry or brickwork to an annual intake of 20 post-Standard IV boys, were opened during the year at Kitwe, Broken Hill and Livingstone.

The additional intake into Senga Hill Agricultural Training School, which was doubled in 1949, has been maintained, and additional financial assistance has been provided for school gardens which are run according to approved methods.

Mass literacy and adult education work will in the future be carried on in Northern Rhodesia by the new type of area school which development teams will have at their disposal. The Education Department is represented on the development teams and therefore the closest co-ordination of work will result. The courses given at the area schools will be determined by the teams, in the light of local needs, and not by central authority.

Two such schools are completed; others are being planned and built. In 1950 the building, planning and recruiting of staff for the area schools proceeded steadily.

The very important community service camps, designed to afford youths from urban areas an opportunity to make contact with rural life and its problems, continued throughout 1950.

HEALTH

Given below are figures of causes of deaths amongst Europeans during 1950:

Diseases of the circulatory system	44
Violence	28
Infective and parasitic diseases	18
Malaria	9
Blackwater fever	7
Diseases of the respiratory system	22
Cancer and other tumours	19
Diseases peculiar to the first year of life	16
Diseases of the nervous system	14
Diseases of the digestive system	11

The European birth rate for 1950 was 28.8 per 1,000 population as compared with 27.09 per 1,000 population in 1949 and the figure for the 1950 death rate showed a slight decrease from 5.28 to 5.2 per 1,000 population.

The approved establishment of the Health Department, including the Silicosis Medical Bureau, during 1950, consisted of:

- 1 Director of Medical Services.
- 1 Deputy Director of Medical Services.
- 1 Assistant Director of Medical Services.
- 1 Senior Specialist.
- 6 Senior Medical Officers.
- 1 Surgical Specialist.
- 1 Medical Superintendent.
- 32 Medical Officers.
- 1 Medical Officer of Health.
- 2 Pathologists (with three assistants).
- 1 Chief Pharmacist.
- 9 Pharmacists.
- 1 Senior Health Inspector.
- 9 Health Inspectors.
- 8 Medical Inspectors.

- 2 Radiographers.
- 1 Physiotherapist.
- 109 Nursing Staff.
- 18 Ward Attendants.
- 1 Superintendent Tutor.
- 1 Medical Entomologist (with three assistants).
- 2 Dental Surgeons (with one Dental Mechanic).
- 2 Leprosy Superintendents.
- 671 African Staff (partially trained).

Silicosis Medical Bureau :

- 1 Chairman.
- 1 Medical Specialist.
- 5 Medical Officers.
- 2 Radiographers.
- 13 African Staff.

These figures show an increase in approved staff over 1949 of:

- 1 Medical Officer.
- 1 Health Inspector.
- 2 Medical Inspectors.
- 1 Radiographer.
- 30 Nursing Staff.

Hospital and clinic facilities in 1950 were:

- 14 Government African Hospitals.
- 7 Government European Hospitals.
- 4 European Child Welfare Clinics.
- 9 African Urban Clinics (General).
- 72 African Rural Dispensaries.
- 4 Mining Companies' European Hospitals.
- 4 Mining Companies' African Hospitals.
- 10 Mining Companies' Clinics, which are run in conjunction with Government.
- 1 Government Leprosy Settlement.
- 10 Mission Leprosy Settlements, subsidised by Government.
- 92 Mission Stations (twelve having a doctor on the staff).

Following on the nutrition surveys made in recent years, plans are in hand for a nutrition and health scheme in the Kawambwa District in 1951.

It was decided in 1950 that further study of the endemiology of yellow fever in Northern Rhodesia was a matter of importance. Plans are now being finalised for this work which, it is hoped, will start in 1951.

The Sleeping Sickness Campaign at Feira continued to operate throughout the year. There is also some evidence that sleeping sickness in the Mumbwa District requires further investigation. It is planned to carry out this investigation as soon as suitable staff becomes available.

The venereal disease team completed its survey and treatment work in the Namwala District and was transferred to the Fort Jameson District in the Eastern Province, where a new campaign was started.

Sufficient staff has been left in the Namwala District for the purpose of maintenance of the most remarkable reduction of venereal disease in that area. The new campaign in Fort Jameson District had an extremely good start.

At the beginning of the year, the old course for the training of dispensary assistants was abolished and, in its place, a combined course was instituted designed to qualify students for work both in hospitals and rural health centres. Maternity and child welfare services continue to prove popular and the number of the African women who choose to have their confinements in hospitals or clinics continues to increase.

The new Silicosis Ordinance came into force on the 1st November; and an important feature of the legislation is that Africans will receive the same medical supervision as Europeans.

SUMMARY OF WORK AND FINDINGS, 1950.

Total of persons examined	22,515
(Europeans, 3,297 ; Africans, 19,218.)	
Total number of examinations	23,484
(Europeans, 3,381 ; Africans, 20,103.)	
Total examined or re-examined for first engagement	4,153
(Europeans, 1,040 ; Africans, 3,113.)	
Total accepted	3,871
(Europeans, 864 ; Africans, 3,007.)	
Total rejected	282
(Europeans, 176 ; Africans, 106.)	
Total first certifications of silicosis alone	95
(Europeans, 11 ; Africans, 84.)	
Total first certifications of tuberculosis alone	29
(Europeans, 3 ; Africans, 26.)	
Total first certifications of silicosis with tuberculosis	7
(Europeans, 1 ; Africans, 6.)	
First certifications of persons whose only known exposure to the risk of silicosis has been in Northern Rhodesia mines :	
Silicosis alone	70
(Europeans, Nil ; Africans, 70.)	
Silicosis with tuberculosis	4
(Europeans, Nil ; Africans, 4.)	
Tuberculosis alone	24
(Europeans, 1 ; Africans, 23.)	

SOCIAL WELFARE

Dr. Graham Bain, Director of Social Services in the Social Welfare Department of South Africa, visited the Territory in February and, in a report, made proposals for the development of Social Welfare Services. As a result two women welfare officers who work among Europeans have already been appointed and posts for two other officers have been approved.

A home of refuge for European children was opened during the year, operated on behalf of Government by the Salvation Army. Children in need of immediate care reside in this home until permanent arrangements for their future can be made. Approval has been given to the purchasing of a house to be used as a permanent children's home and this will be opened in 1951. The Salvation Army continues to run an Old Men's Home at Ndola. The Women's Institute have initiated a collection to provide funds for an Old Women's Home.

During the year a committee investigated the status of Coloured persons in Northern Rhodesia. Several recommendations concerning social welfare were accepted in principle by the Legislature.

Although there is no statutory old age pension scheme, an allowance is given to any European person who has lived in Northern Rhodesia for fifteen of the last twenty years and who is over sixty. The allowance is based on a sliding scale and is not given to any person whose income is more than £150 per annum. Special cases of destitution, both European and African, are met by compassionate grants from Government funds. There is no pension scheme for Africans since their tribal system ensures that the family shall maintain the aged in the home village.

The provision of African welfare centres, of recreational facilities and of useful occupations for leisure hours increased during the year. Some new welfare centres were opened in the rural areas, and most administrative districts now have at least one such centre. Football and athletics are becoming increasingly popular amongst Africans, who at some centres have also taken up boxing, golf and tennis. European-type indoor games spread rapidly at these centres. Youth clubs are being organised in several places and are increasing in popularity.

In the industrial areas, Africans continue to demand libraries, concerts, cinemas, lecture and debating societies, classes in arts and crafts, organisation of choirs and bands and all those more pleasant occupations of the mind to which people in the transitional stage from a primitive to a modern civilisation take so readily. These demands

are being rapidly met, although still not rapidly enough, and the bigger industrial firms are now confirmed believers in this kind of welfare. The progress made during the year cannot be set out in figures but, to the experienced resident travelling round the industrial areas, is most apparent.

Juvenile delinquency has not yet assumed serious proportions in this Territory. Juvenile offenders are dealt with either by corporal punishment, imprisonment, fine or detention in a reformatory. African juvenile offenders may also be released on condition that they attend a Salvation Army school for the period of their sentence.

Chapter 8 : Legislation

During 1950, fifty-four Ordinances were enacted.

The Specific Loan (Rhodesia Railways) Ordinance, 1950, authorised the borrowing by the Northern Rhodesia Government of £7,500,000. This money will be reloaned to the Rhodesia Railways for expenditure of a capital nature on the improvement of the railway system.

The Workmen's Compensation (Amendment) Ordinance, 1950, was introduced to give an injured workman a degree of protection in respect of his employment, but without infringing an employer's legal right of dismissal under a contract; to increase by a minimum of 50 per cent. all compensation payments made under the Ordinance, except for children's allowances; and to entitle permanently disabled African workmen to pensions on a basis similar to that adopted for non-African workmen, instead of merely giving them lump-sum payments.

Prior to the enactment of the Legislative Council (Amendment) Ordinance, 1950, the conviction of a person of any offence punishable with six months' imprisonment or more entailed his disqualification for life, unless in any particular case the Governor in Council specially removed it, from candidature for the Legislative Council and, if he was at the time an Elected Member, the vacation of his seat in the Council, even though the actual offence might be trivial and the Court might pass a lesser sentence. The amending Ordinance provided that such disqualification or vacation of seat should ensue only upon sentence to six months' imprisonment or more and that the disqualification should cease five years after discharge from prison. The power of earlier removal of the disqualification in any particular case by the Governor in Council was retained.

The Northern Rhodesia Police Reserve Ordinance, 1950, modelled on the Kenya legislation, provides for the establishment of a Volunteer Police Reserve to assist the regular police in the maintenance of law and order.

The Northern Rhodesia Police (Amendment) (No. 2) Ordinance, 1950, prohibits police officers from being members of any trade union or similar body other than an association constituted and regulated pursuant to regulations made under the Ordinance.

The Motor Traffic (Amendment) Ordinance, 1950, made provision for the issue of a highway code and the creation of the offence of supplying liquor to the driver of a public service vehicle while on duty. It also amended the existing law by increasing the penalties for reckless driving or being drunk in charge of a vehicle, by establishing speed limits, and by changing the procedure relating to the issue of road requirements.

The Trade and Supplies Ordinance, 1950, consolidated the provisions of the Export and Imports (Temporary Control) Ordinance and the Control of Supplies Ordinance and vested in the Director of Trade, Transport and Industry the necessary powers for the exercise of control of exports, imports and supplies.

The Hotels Ordinance, 1950, enables control to be exercised over hotels for the purpose of enforcing reasonable standards of cleanliness, sanitation and service. It provides for the establishment of an hotels board to control the licensing of hotels and to carry out other duties entrusted to it under the Ordinance.

Intentionally temporary legislation (The Silicosis (Temporary Arrangements) Ordinance, 1945) was used for several years to govern the system of medical examinations and compensation awards which was brought into being on the discovery of the occurrence of silicosis in the Northern Rhodesia copper mines. In 1949, a commission of experts from the United Kingdom and from South Africa was appointed to advise upon the form to be taken by permanent legislation for the same purpose; it reported in September of that year. A new Ordinance, closely following the commission's recommendations, was enacted late in 1950 and is now in operation. The new Ordinance differs little in form or substance from the South African Silicosis Act of 1946 as amended in 1950, but unlike its South African counterpart the Northern Rhodesia Ordinance brings all African workers under a system of initial and periodical examination as thorough in every respect as the system applied to European miners employed in Northern Rhodesia mines—a feature not practicable in South Africa because of the enormous number of African workers (over 272,000) in South African scheduled mines. The new law grants to compensable persons of both races a lump sum for certified first stage silicosis and for tuberculosis without silicosis; a monthly life pension for second stage silicosis; and a larger pension for silicosis in the third stage and for silicosis combined with tuberculosis. Provision is also made for the dependants of deceased beneficiary miners of both races. The rates of compensation for both races are appreciably higher than those payable in parallel cases under the legislation of either South Africa

or Southern Rhodesia and more favourable than the old Northern Rhodesia rates.

The Natural Resources Ordinance, 1950, provides the necessary machinery to ensure that the natural resources of the Territory are conserved and, where possible, improved.

It is normal business practice for a farmer wishing to borrow money to give a stop-order against the security of his growing or future crops. The Farmers' Stop-Order Ordinance, 1950, protects lenders by providing for the registration of stop-orders, by making any stop-order null and void if not registered, and by making stop-orders rank for priority among themselves according to the date of registration.

All Photos: Northern Rhodesia Information Department



AFRICAN ANNOUNCER, LUSAKA RADIO STATION



MR. R. C. S. STANLEY, AS ACTING GOVERNOR, SIGNS THE MINERAL ROYALTIES AGREEMENT



EUROPEAN FARMERS' DAY AT MAZABUKA



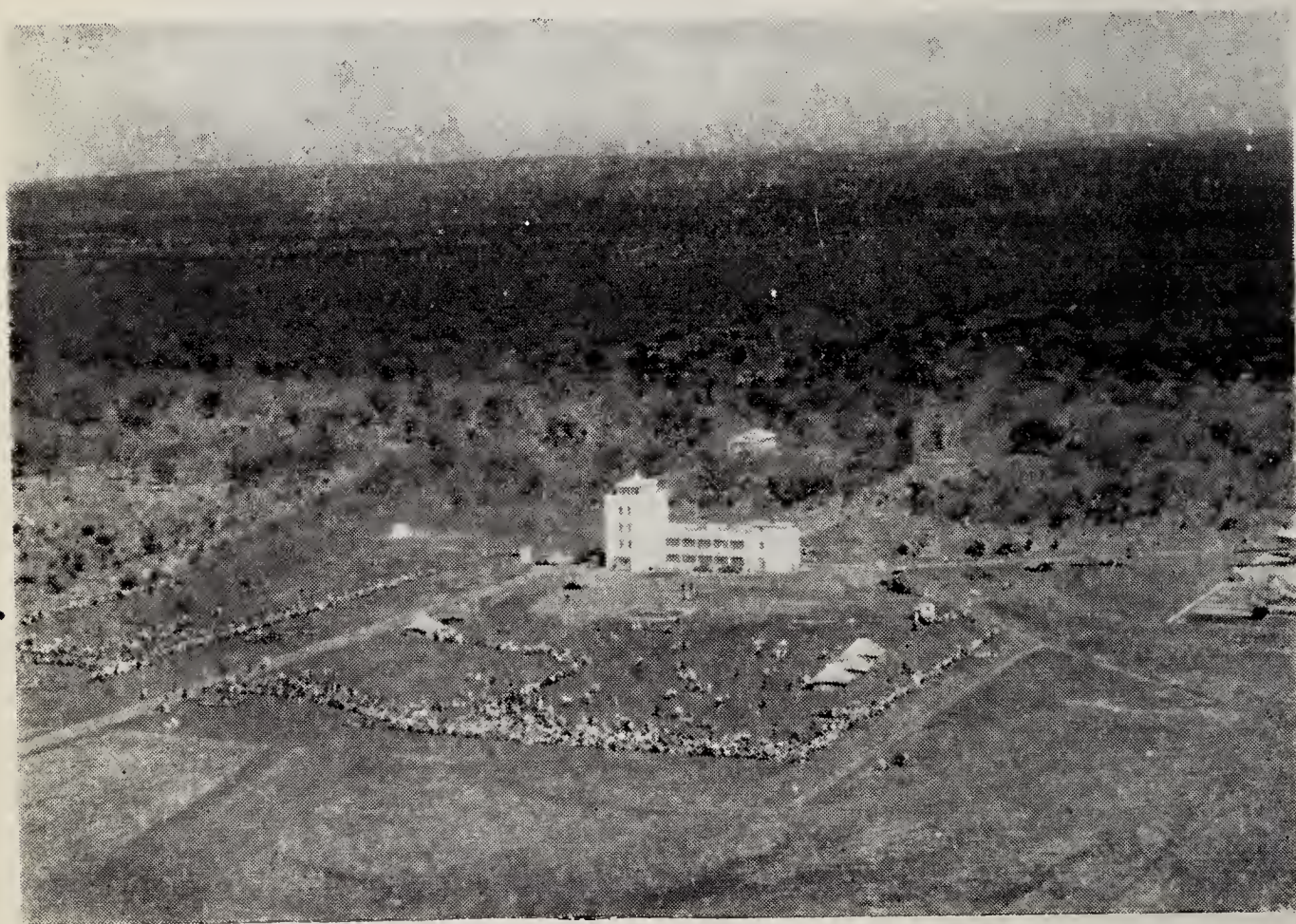
INSPECTING THE GROUND-NUT PLANTS AT THE MUMBWA PILOT SCHEME



A NEW PHOTOGRAPH OF THE BROKEN HILL MINE



LORD PAKENHAM, AS BRITISH MINISTER OF CIVIL AVIATION, INSPECTS THE
GUARD OF HONOUR AT THE OPENING OF LIVINGSTONE AIRPORT



AN AERIAL VIEW OF THE OPENING OF LIVINGSTONE AIRPORT



THE BOILING POT, VICTORIA FALLS



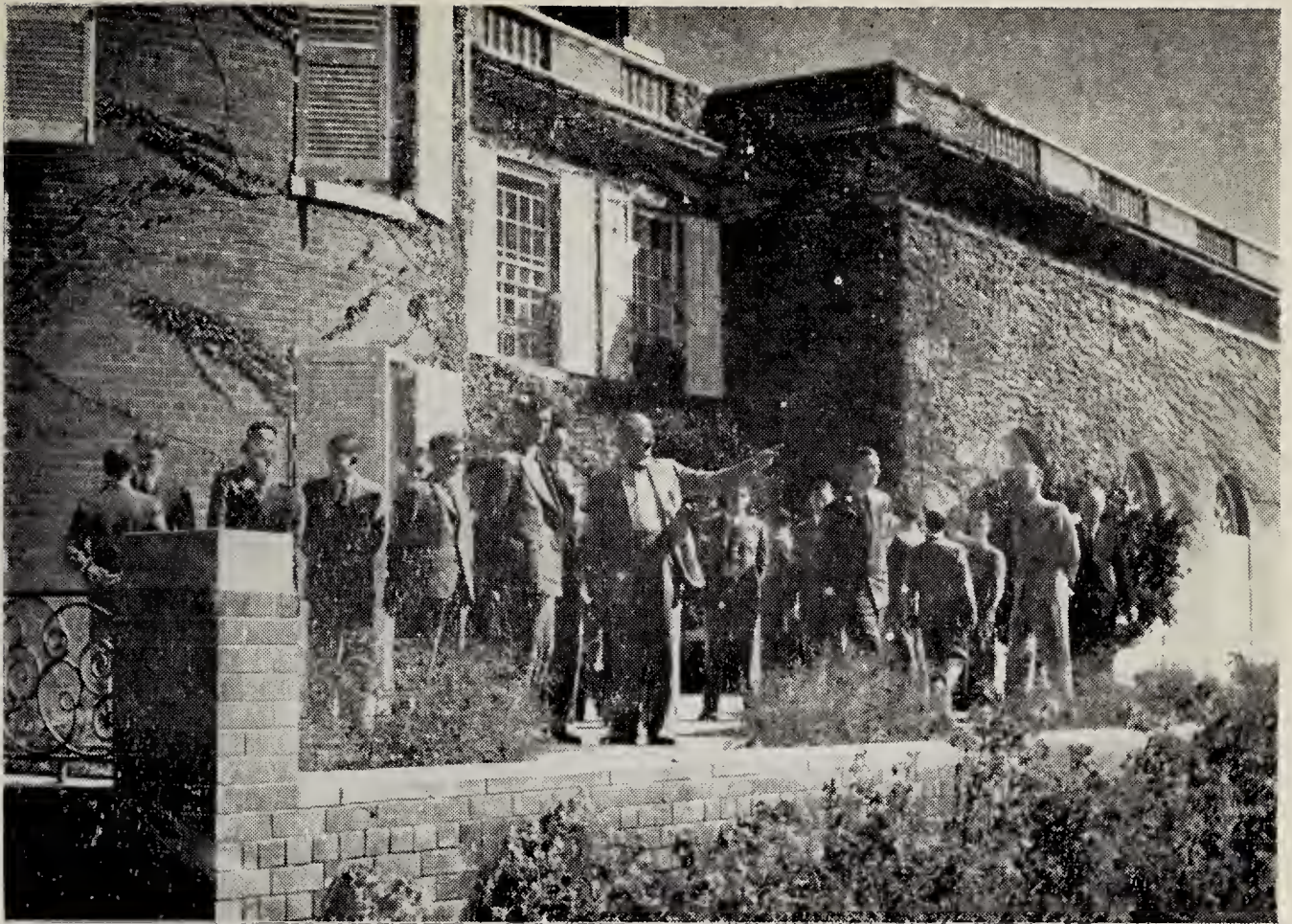
GOVERNMENT EUROPEAN SCHOOL, LUSAKA



OFFICIAL OPENING OF THE 110TH A.K. TYPE HOUSE TO BE ERECTED IN LUSAKA



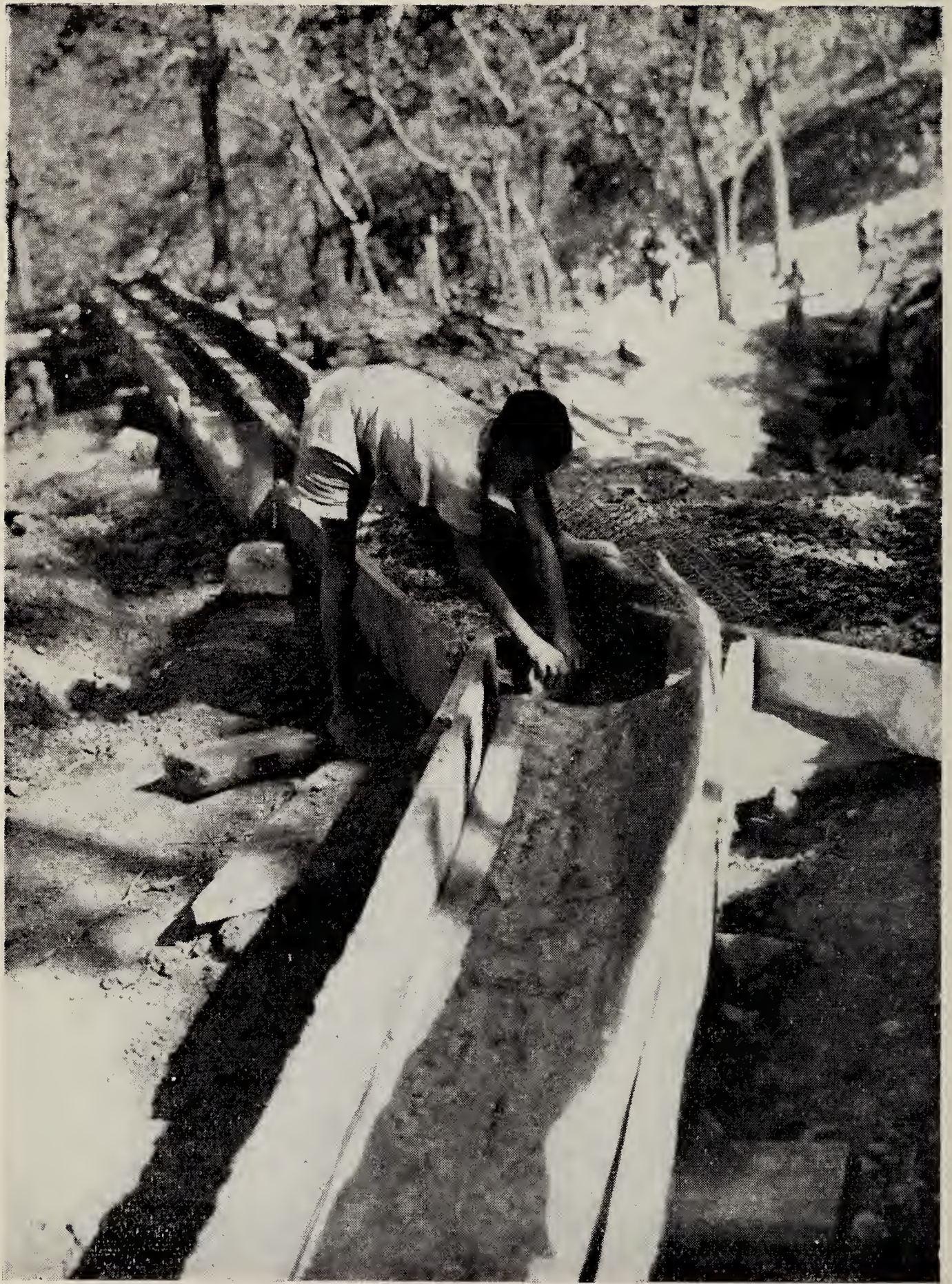
MARSHALL AID TRACTORS ARRIVING AT LUSAKA



A PARTY OF BRITISH SCHOOLBOYS BEING SHOWN ROUND GOVERNMENT HOUSE



THE PONTOON AT THE LUAPULA RIVER



TIN MINING AT MASUKU, NEAR CHOMA

Chapter 9 : Justice, Police and Prisons

The courts administering justice are the High Court, the Subordinate Courts, and the Native Courts. The High Court consists of a Chief Justice and a Puisne Judge, and, within the limitations of the High Court Ordinance, has the jurisdiction and powers of the High Court of Justice in England. The High Court Buildings, including the High Court Registry, are at Livingstone, which is still the judicial headquarters of the Territory. The Puisne Judge is stationed at Ndola, where there is also a District Registry, to facilitate the administration of judicial work on the Copperbelt. In addition to Livingstone and Ndola, High Court Sessions are held periodically at Lusaka, Kasama, Fort Jameson and Mongu, and occasionally at various district headquarters on special circuit. Under the Mental Disorders Ordinance there has been vested in the High Court jurisdiction to administer and control the estates and property of patients under that Ordinance; and the Registrar of the High Court is to exercise the powers of the Master in Lunacy or of the Court of Protection in England. The Registrar of the High Court is also the Registrar of Companies, Registrar of Patents and Trade Marks, Registrar-General of Births, Deaths and Marriages, and Sheriff of the Territory.

Subordinate to the High Court are the Magistrates' Courts created by the Subordinate Courts Ordinance. These are of four classes : Class I Courts being those of the Provincial Commissioners and Resident Magistrates, Class II Courts those of the District Commissioners, Class III Courts those of District Officers not in charge of a district, and Class IV those of such cadets in the Provincial Administration as are given judicial powers. At present there are Resident Magistrates at Ndola (two), Livingstone, Lusaka, Kitwe and Fort Jameson. All these Subordinate Courts exercise criminal jurisdiction ; Class I and II Courts can try all criminal offences, though they require the High Court's permission to try treason or murder ; Class III and IV Courts have restricted jurisdiction. All criminal cases tried by Subordinate Courts are liable to review by the High Court ; and there is a limit, varying according to the class of the court, to the sentence which can be imposed without the confirmation of the High Court being required. Subordinate Courts, except Class IV Courts, have civil jurisdiction, limited according to the amount involved. Appeals,

both civil and criminal, lie from the Subordinate Courts Class I and II to the High Court, and from the lower Subordinate Courts to the Provincial Commissioner's Courts.

The Native Courts are set up under the Native Courts Ordinance (for all the Territory except Barotseland) and the Barotse Native Courts Ordinance (for Barotseland). The Courts are constituted in accordance with the native law and custom of the area in which the particular Court is to have jurisdiction, and recognised under the Ordinances by warrant of the Governor, or of a Provincial Commissioner with the Governor's consent. The powers and jurisdiction of the Court are normally set out in its warrant. Native Courts of Appeal may also be recognised. Except in Barotseland, in areas where there is a Native Court of Appeal, appeals from the Native Courts of first instance lie to that Court, and from that to the local District Commissioner's Court. Where there is no Native Court of Appeal they lie to the local District Officer's Court, if any, otherwise to the District Commissioner's Court. There are further rights of appeal, from the District Officer's Court to the Provincial Commissioner's Court and from the District Commissioner's Court or Provincial Commissioner's Court to the High Court. In Barotseland, appeals lie to one or more Native Courts of Appeal, and thence to the Provincial Commissioner's Court in criminal cases and to the High Court in civil cases; if there is no Native Court of Appeal they lie direct to those Courts.

Southern Rhodesia, Northern Rhodesia and Nyasaland have established a joint Court of Appeal, known as the Rhodesia and Nyasaland Court of Appeal. Appeals, both civil and criminal, lie from the High Court of the Territory to this Court of Appeal, though in many cases leave of the Court is required for the appeal. The Rhodesia and Nyasaland Court of Appeal meets six times a year, in Salisbury, Bulawayo, Livingstone or Blantyre. In the case of civil appeals from Northern Rhodesia to the Rhodesia and Nyasaland Court of Appeal a further appeal lies to the Privy Council, either of right or with leave of the Court of Appeal. There is no corresponding provision for criminal appeals to the Privy Council, but a petition may always be presented to the King in Council for special leave to appeal.

The law administered in the High Court and Subordinate Courts is basically English law, being the common law, statute law and doctrines of equity in force in England on the 17th August, 1911 (where not at variance with subsequent enactments), together with such later English statutes as have been applied to the Territory, certain Orders in Council and the Northern Rhodesia Proclamations and Ordinances. Practice and procedure are governed by the Criminal Procedure Code in criminal cases, and by the High Court and Subordinate Court

Rules in civil cases ; but subject to these the High Court and Subordinate Courts observe the practice and procedure for the time being in force in, respectively, the English High Court of Justice, and the English County Courts or Courts of Summary Jurisdiction. In cases in the High Court and Subordinate Courts where natives are involved, and in all Native Courts, native customary law is followed where it is not repugnant to justice or equity and not incompatible with local enactments.

POLICE

The authorised establishment of the Force in 1950 was 214 European police officers and 1,585 African policemen. The establishment also included 27 European and 50 African civilian employees.

The European police establishment comprises 34 Superior Officers and 182 Inspectors and Assistant Inspectors. African constables can rise to the rank of African Inspector. During recent years sustained efforts have been made to improve the standard of literacy of the African police. By the end of 1950 well over 60 per cent. of the African police held certificates for the Government Standard IV examination in English, many having passed higher examinations.

For police administration purposes, the Territory is divided into four police divisions. The Southern Division, with headquarters at Livingstone, includes the Southern and Barotse Provinces; the Central Division, with headquarters at Broken Hill, includes the Central and Eastern Provinces; the Western Division, with headquarters at Kitwe, includes the Western Province, and the Northern Division, with headquarters at Kasama, includes the Northern Province.

There are thirty-two police stations and police posts in the Territory. Two police stations for the policing of mine compounds at Nkana and Luanshya respectively were under construction at the end of the year.

Police stations are established in all districts through which the railway line passes. In other areas there are police detachments under European officers at Mongu, Fort Jameson, Mumbwa, Solwezi, Balovale, Kawambwa, Kasama, Fort Rosebery, Abercorn, Nakonde and Lundazi, and there are small posts under African N.C.O.s at Mulobezi, Namwala, Kabompo and Nyimba.

The headquarters of the Commissioner is at Lusaka. Criminal Investigation Department headquarters was moved during the year from Livingstone to Lusaka.

The Police Training Depot is situated at Livingstone. Work was commenced in 1950 on a site near Lusaka for a new Training Depot. The Quartermaster's Stores, which are likewise situated in Livingstone, will be moved to Lusaka when the new Training Depot there is completed.

The Chief Immigration Officer, who is also the Chief Passport Officer, is stationed at Livingstone. He is a Superintendent of Police. The enforcement of immigration laws is undertaken by members of the Force and for this purpose all European members of the Northern Rhodesia Police are appointed Immigration Officers.

Penal code offences numbering 12,411 and 22,502 statutory offences were dealt with by the Force during the year.

The increasing industrialisation of the Territory and the consequent growth of population in urban areas have been followed by a progressive increase in recent years in the number of cases handled by the police, as the following comparative tables show:

Year	Penal Code Offences	Statutory Offences	Total All Cases
1945	5,378	10,408	15,786
1946	6,109	14,207	20,316
1947	7,113	19,240	26,353
1948	7,969	20,070	28,039
1949	10,655	19,202	29,857
1950	12,411	22,502	34,913

During the year 26,732 persons were convicted in cases brought by the police. This figure represents an increase of 3,384 over that for 1949.

PRISONS SERVICE

The Prisons Service is under the control of the Commissioner of Prisons with headquarters at Livingstone. The authorised establishment for 1950 was 24 officers, which included 1 technical instructor, 1 building foreman, 3 clerks, and 529 African warders, clerks and artisans.

There are six central prisons and thirty-one local district prisons. The central prisons are staffed by prison warders, and all but one are under the control of European officers of the Prisons Service. One central prison is under the control of an officer of the Northern Rhodesia Police. Of the thirty-one local prisons five are staffed by prison warders, and the prison superintendents are officers of the Northern Rhodesia Police. The sixth is under the control of a European prison officer. Five local prisons are situated in the Copperbelt area.

Twenty-six local prisons are staffed by District Messengers of the Provincial Administration, and the District Commissioner is prison superintendent in each case. These District Messengers are paid, rationed and clothed by the Prisons Service. The average number of messengers employed at each district prison is three, which does not warrant these duties being taken over by the regular prison staff.

All African prisoners with sentences in excess of six months are transferred to central prisons to serve their sentences. European prisoners with long sentences are usually transferred to Salisbury Central Prison in Southern Rhodesia, by arrangement with the Southern Rhodesia Government.

All long-term prisoners are taught trades in the industrial sections of central prisons. In the carpentry sections, African artisan instructors supervise the training of prisoners in this type of work. A European technical instructor is in charge of the carpentry section of industries and visits all central prisons to advise on the best methods of training and instruction. Tailoring is extensively carried on in all central prisons, and prisoners are under the guidance of experienced African tailor instructors. They receive a full training in the actual cutting out of a garment to the final sewing up by machine.

The building trade is also taught in the prisons, and this section is under the supervision of a European building foreman, who is assisted in the training of prisoners by experienced African artisan bricklayers.

African artisan shoemakers supervise the training of prisoners in the art of shoe-repairing in three of the central prisons, and when a prisoner has been fully trained he is sent to a prison where his services would be most useful in the training of other prisoners.

Sisal mats are made in some establishments, and basket work is being successfully performed at Lusaka Central Prison.

The progressive stage system is in operation at all central prisons and has proved highly successful. The gratuity of 2s. per month earned by prisoners who enjoy the privileges of this system may be placed to their credit against their day of discharge. They are permitted to spend up to one-half on minor luxuries during their imprisonment.

Camps for first offenders are situated at Livingstone, Lusaka, Kasama and Fort Jameson Central Prisons and at Ndola Local Prison. Bwana Mkubwa Camp was opened as a penal settlement during the year and this will be developed on the most modern and progressive lines possible.

In April, 1950, an area of land was taken over at Katombora, near Livingstone, for the purpose of establishing a borstal institution. Prisoners are engaged on clearing the site for the preliminary work, and the actual work on the institution buildings will begin early in 1951.

Chapter 10 : Public Utilities and Public Works

In the main towns of the Territory, the supply of electricity and water is either in the hands of the municipality (as at Ndola and Livingstone), the mining companies (as on the Copperbelt towns and at Broken Hill), or the Government (as at Lusaka). Smaller townships rely on boreholes for water supply and have individually owned lighting plants at hotels, hospitals, railway stations, etc.

The supply of electricity and water, except in the mining towns, has begun to fall short of requirements owing to increased population and new industrial developments since the war, and to the difficulty of obtaining new plant for the water and electricity undertakings. In the mining towns, green lawns and attractive flower gardens all the year round are possible because of unlimited water pumped out of the mines, and lighting is an almost negligible drain upon power supplies which have to provide enormous industrial current. In the mine townships electricity and water are provided free ; in the adjacent Government townships which the mines supply, standard charges are made.

On the Copperbelt electricity is generated from steam turbines. Broken Hill is supplied by hydro-electric power stations from the Mulungushi Falls and the Lunsemfwa River. Livingstone has harnessed water from the Zambezi led by canal to one of the great Zambezi gorges. Steam and diesel engines produce Lusaka's electricity.

The rapid growth of Lusaka had begun by 1949 to cause serious overloading on the power station plant, and was also overtaking the available pumping plant supplying the town with water from the boreholes. Extra generating and pumping plant was installed in 1947, and plans for further expansion of electricity generation and distribution, and water pumping and reticulation are being put into effect.

AERODROMES

The new airport at Livingstone was opened in August by Lord Pakenham, Minister of Civil Aviation. This airport is excellently situated for pan-African trunk-line operation and is in the approximate centre of the populated areas of the Rhodesias, thereby serving the

main towns of Salisbury, Bulawayo and Lusaka, which are almost equidistant from Livingstone. Its proximity to the Victoria Falls gives it a unique distinction among the world's existing airports.

The main runway has a bitumen surface 7,500 feet by 200 feet and a permissible equivalent single wheel loading of 45,000 lb. The secondary runway has an all-weather surface 4,800 feet by 80 feet and a permissible equivalent single wheel loading of 30,000 lb. A taxi-way eighty feet wide connects the runways with the concrete service and passenger apron of 225,000 square feet. For night flying a double line of contact lights with sodium orbiting lights is provided, with a flashing beacon and necessary obstruction lights.

The operations building, which is separated by several hundred yards from the passenger terminal, includes the meteorological and aeradio control rooms, airport administration offices, fire-fighting control and flying and approach control. The terminal building comprises the arrival and departure sections, the concourse, lounge, restaurant, bar and air operators' offices. The Government hangar has a floor area of 32,500 square feet. Electricity is derived from the Victoria Falls hydro-electric power supply and a diesel-driven stand-by alternator. Water is pumped three and a half miles from the Zambezi River. The following figures give an idea of the size of the project:

Area of clearing	..	..	..	600 acres.
Excavation	..	..	..	120,000 cubic yards.
Filling	..	..	..	30,000 cubic yards.
Stone quarried and crushed	..	..		130,000 cubic yards.
High grade concrete in paving		..		11,000 cubic yards.
Average crushing strength, 28 days	..			6,390 lb./sq. in.
Other concrete	..	..	..	3,000 cubic yards.
Length of piped drains and culverts	..			8,000 lin. yards.
Length of stone paved open drain	..			3½ miles.
Length of cable ducts	..	..	..	3,500 lin. yards.
Length of cable	..	..	..	10 miles.
Total area of buildings	..	..		60,000 square feet.

A major scheme to raise the standard of the main runway at Lusaka airport to be completely "all-weather" and to take aircraft of 90,000 lb. all-up weight was started during the year. This will enable Lusaka to be used as a diversionary landing ground for Hermes aircraft using the new Livingstone airport.

Improvements were made at Broken Hill, Kasama, Fort Jameson, Mpika, Abercorn and Mankoya aerodromes, while construction work on new airfields at Mongu and Fort Rosebery was begun.

The new landing ground at Kasempa was completed early in the year.

BUILDINGS

Labour (Skilled).

There has been no real improvement in this labour category, and delays have occurred on various projects caused by shortages of skilled craftsmen.

Labour (Unskilled).

There have again been acute shortages throughout the Territory of this type of workman, and contractors have experienced great difficulty on many projects in maintaining progress, and in certain cases skilled craftsmen had to be used for labouring purposes. There is no doubt whatever that the demands for unskilled labour greatly exceed the numbers available.

Materials.

It was decided that the supply of building materials for this year would be the responsibility of contractors. This decision was made as it was fully expected that the supply position would be easier than hitherto, and that this responsibility would tend to reduce the time taken up in such activities by headquarters staff. This principle has met with a varying degree of success and it has been found that contractors were unable, without Government's assistance, to acquire all building materials, and assistance has again been necessary by the Public Works Department in order that building progress be maintained at a satisfactory level through the year.

The principal shortages during 1950 were as follows:

- (a) *Bricks.* At the beginning of the year, contracts were placed for large quantities of bricks, but as in previous years, the manufacturers have been, in many cases, unable to meet the contracts in full. This situation was particularly brought about by the failure of brick-making machinery and decline of the manufacturers' labour force.
- (b) *Cement.* The supply of this material has fluctuated throughout the year and has, in many cases, retarded building progress. The supply position in the early part of the year deteriorated owing to great congestion on the railways between Mafeking and Bulawayo. When this situation had

cleared itself, serious congestion occurred at the port of Beira. It is a recorded fact that two ships containing cement were unable to dock and remained outside the port for a period of three months. The position towards the end of the year was still very difficult.

- (c) *Steel Windows.* Difficulties were met in obtaining supplies of this building component in the latter part of the year, manufacturers experiencing great difficulty in obtaining raw materials, and a regular supply position in the future is very much in doubt.
- (d) *Sand.* During the early part of this year, difficulties were experienced in the obtaining of a regular supply of sand for building purposes. This situation was created by an acute shortage of railway trucks, and the action taken to alleviate the position included an extension of the railway siding at Karubwe, since when the position has been much more satisfactory.
- (e) *Timber.* The latter portion of this year has seen a gradual decline in supplies and contractors are finding it extremely difficult to fulfil their requirements.

Building Construction.

(a) *Completion of Silicosis Bureau, Kitwe.* This building, which is considered to be one of the finest examples of modern architecture within the Territory, was opened by His Excellency the Governor during the month of March, 1950.

(b) *Red Locust Control Building at Abercorn.* This was opened by Dr. B. P. Uvarov, Chairman of the Anti-Locust Research Organisation, London, towards the end of 1949.

(c) *Maxwell Hostel, Lusaka.* This hostel was opened by His Excellency the Governor on 14th April, 1950, and provides accommodation for seventy-five boarders.

(d) *Livingstone Airport, Livingstone.* As already mentioned this important air terminal was opened for air traffic in August, 1950, and provides an excellent example of modern airport design which embodies up-to-date methods of flying control.

Housing.

Practically the whole of the eighty-seven A.K. permanent-type houses, scheduled for erection during 1950, have been completed. The

critical housing situation, especially in Lusaka, made it necessary for housing to be erected at high speed, and various methods of prefabrication were examined. It was decided that the F.S.M. type house was the most suitable type of prefabrication for this Territory. An order was placed with a South African firm for twenty-four such houses for erection at Lusaka, Broken Hill and Ndola.

Schools.

The increase in residential development is a serious strain on existing school accommodation, and it was essential that additional classroom accommodation be provided by the quickest possible means. The F.S.M. type of construction was chosen and additional classrooms were planned on the Copperbelt, Broken Hill, Lusaka, Mazabuka and Livingstone. This accommodation will be provided at an early date in the coming year. Detailed sketch designs for the secondary school at Lusaka have been agreed and the final working drawings are well advanced. It is anticipated that construction of the Lusaka schools will be commenced in the summer of 1951.

Hospital Accommodation.

The standard rural type hospital has been designed and approved, and construction has started at Balovale, and it is hoped in the near future to commence operations at Fort Rosebery. A host of small alterations have been carried out at the European Hospital, Lusaka, and preliminary planning has started on the proposed African Hospital at Lusaka.

Office Accommodation.

A standard type block is now in course of erection for the Water Development and Irrigation Department. It was decided to make use of F.S.M. construction for the proposed Public Works Department office block, and work commenced late in the year.

Police Offices.

Work has commenced on the police camps at Wusikili and the Roan Antelope Copper Mine compound.

CONTRACTS AWARDED DURING 1950

Work	Locality	Amount £
Accountant-General's Strong Room	Lusaka	2,545
Single Staff Quarters	Kitwe	14,475
17 F.S.M. Houses	Lusaka	46,163
4 F.S.M. Houses	Ndola	10,862
3 F.S.M. Houses	Broken Hill	8,146
A.K. Housing	Lusaka, Choma, Copperbelt	232,737
Power Station Extensions and Cooling Pond	Lusaka	7,616
Unit C Police Office and Police Lines	Luanshya	31,161
Unit C Police Office and Police Lines	Wusikili	28,753
Standard Type Office Block . .	Lusaka	9,052
F.S.M. Office Block for P.W.D.	Lusaka	48,000
African Housing (John Laing) .	Outstations	155,180
		<u>£594,690</u>

CONTRACTS COMPLETED DURING 1950

Work	Original Amount £	Work Done 1950 £
Maxwell Hostel	37,821	7,071
Silicosis Bureau	46,000	6,445
A.K. Houses, Ndola	13,544	5,828
A.K. Houses, Ndola	13,544	2,914
A.K. Houses, Kitwe	16,405	9,100
A.K. Houses, Kitwe	17,524	9,100
A.K. Houses, Kitwe	35,050	8,491
62 A.K. Houses, Lusaka	189,522	69,395
Infants' School, Kitwe	38,729	10,604
Infants' School, Luanshya	38,186	16,485
Infants' School, Chingola	30,131	11,204
Infants' School, Mufulira	39,637	14,667
Temporary Classrooms—Boys' School, Lusaka	5,845	2,783
Malarial Wards	10,265	4,711
Nurses' Hostel	11,652	5,061
Additions to Transmitter Station . .	10,035	5,882
Aluminium Houses at Military Camp . .	9,600	4,728
Additional Secretariat Offices	17,991	11,815
Hostel for Apprentice Mechanics	3,214	2,102
Single Staff Quarters, Chingola. . . .	8,600	3,594
	<u>£593,295</u>	<u>£211,980</u>

MORE IMPORTANT WORKS
UNDERTAKEN DEPARTMENTALLY

1. Civil Servants' Hostel (Stage III)	Lusaka
2. Alterations to Administrative Secretary's House	Lusaka
3. Housekeeper's Cottage, Longacres	Lusaka
4. Housekeeper's Cottage, Legco Guest House	Lusaka
5. 2 Houses for Heads of Departments	Lusaka
6. Medical Officer's House	Lusaka
7. Boma Office Extensions	Broken Hill
8. P.W.D. Depot	Broken Hill
9. Labour Hostel	Broken Hill
10. 1 Block Single Staff Quarters	Mazabuka
11. Civil Servants' Hostel	Livingstone
12. P.W.D. Depot	Livingstone
13. Staff Housing	Livingstone
14. Chalet Camp, Airport	Livingstone
15. African Hospital.	Choma
16. African Hospital.	Balovale
17. Staff Housing	Balovale
18. Office Blocks	Ndola
19. Boma Office Extensions	Kitwe
20. Boma Office Extensions	Luanshya
21. Police Office Extensions	Luanshya
22. 2 Blocks Single Staff Quarters	Mufulira
23. P.W.D. Depot	Fort Rosebery
24. Staff Houses	Fort Rosebery
25. Airport Building	Abercorn
26. Staff Housing	Abercorn
27. Staff Housing	Kasama
28. Post Office	Kasama
29. Indian School	Fort Jameson
30. Police Offices	Fort Jameson
31. Staff Housing	Fort Jameson

WATER DEVELOPMENT AND IRRIGATION
DEPARTMENT

By the end of 1950, the engineering staff of the Department had grown to thirteen engineers, and this enabled provincial water engineers to be located in all provinces and the work to be better controlled. By the end of the year the three senior Grade I engineers were acting in the capacity of superintending engineers, each controlling in detail the work of two provincial water engineers.

The number of technical assistants increased from nine to thirteen in this period, but the Department was still short by three, and this considerably affected the duties of survey, drawing, and general supervisory work. Efforts to increase the sanctioned numbers in all grades were made, and late in the year Government decided to obtain an opinion from an eminent outside adviser on the existing and future organisation of the Department.

The work undertaken by the Department continued on the accepted lines, and dams, wells, weirs and boreholes were constructed to the limit of the Department's ability, great emphasis, however, being placed on the essential supervision by European staff in the field. Work on larger dams was carried out, and the Department's earth-moving equipment was used mainly on these. Such equipment is now to be devoted increasingly to the European farming areas, for water conservation and hydraulic works as opposed to purely soil-conservation activities, which properly remain the responsibility of the Soil Conservation Unit.

Several irrigation schemes from larger reservoirs were under investigation in the Kaleya and Ngwezi Valleys, while the Kafue, one of the Territory's chief rivers, is to be investigated for development by this and other technical Departments. The advice of an eminent irrigation engineer was obtained, so that the potential in irrigation, water storage, and hydro-electric production could be estimated.

The Hydrological Section of the Department is now well established and its equipment and staff are steadily becoming more efficient. Discharge observation boats, built by the Department, are now located at many of the key sites on the larger rivers, and data is being collected which, year by year, will gradually become a valuable source of information for various projects.

Rain gauges are now located at fifty sites, and the data is accumulating for subsequent analysis and use.

The Water Board and the Natural Resources Board continue to utilise the Department to an increasing extent, for the investigation of applicants for the Territory's water and for assistance on engineering works. Two engineers were specially deputed to these investigations during the year.

The Department's new offices were completed during 1950 and are expected to be in use by the end of February, 1951.

The maintenance of the Department's vehicles was placed in the hands of the Public Works Department, and the attention of the Department's own mechanical staff was devoted to its own plant and field equipment.

Owing to the lack of experienced drillers, it was only possible to keep an average of eight machines running throughout the year. Six new drilling rigs arrived and were all fitted with shot attachments;

two out of the seven "Gem" machines at present in use have also been similarly converted.

Large consignments of drilling tools and casing were received and it should now be possible to complete a larger drilling programme.

The following table compares the results of the last two years:

	1949	1950
Total number of boreholes drilled	178	178
Total footage drilled	20,703	20,325
Total yield from successful bores in gallons per day	4,798,102	2,681,134
Percentage of successful bores . .	66.8%	72.5%

The Southern and Eastern Provinces carried out rather more works than elsewhere, whereas in the Northern and Western Provinces the provincial water engineers devoted most of their time to the investigation of water supplies. Central Province has but recently been allocated a provincial water engineer and the organisation there is still developing. During the year thirteen water supply schemes were completed and a further four were brought into operation. Eight schemes still require to be completed.

AFRICAN HOUSING

An African Housing Department was established in 1947 under the Commissioner for Local Government, and in the Territory's development plan the sum of £1,500,000 is provided to build houses for Africans in towns and at district stations. All of this sum is being spent on permanent brick cottage-type houses, most of which are being built by contract at a cost of approximately £165 each, including estate, service and overhead charges. Approximately 6,500 of these houses will be built in towns administered by local authorities and let to the public. The balance of approximately 2,500 houses is for Government's own employees in towns and district stations. The 6,500 being built for letting will be handed over against loans to local authorities carrying annual interest of $3\frac{1}{2}$ per cent. and repayable over forty years.

As from 1st January, 1951, the responsibility for supervising contracts will be transferred to the Public Works Department. The Commissioner for Local Government will remain Commissioner for African Housing but his duties will be purely administrative.

It is the aim to encourage the emergence of a stabilised African community in towns, living a family life in neighbourhood units with adequate public services. All local authorities and the Government have, however, not been able to do more than set this target before themselves and make a start with its realisation. The increase in population of all races in the towns has outpaced the capacity of the community, the Government and the local authorities to build new houses of a satisfactory type. The shortage of housing for Africans in most towns has been distressing and recourse has necessarily been had to temporary or semi-permanent houses of the traditional type but to a higher standard. Interest-free loans from the Government were given for the building of these temporary houses. Some 3,500 permanent houses of the programme were substantially finished in 1950 and several hundred temporary and semi-permanent houses were built by local authorities.

Shortage of imported materials was no longer a dominating obstacle to progress. Labour shortage, skilled and unskilled, became of equal importance.

An Urban African Housing Ordinance passed in 1948 sets up housing authorities and provides for the fixing of rents, the establishment of committees of householders and the empowering of local authorities to compel employers of substantial numbers of Africans to build houses for them and their families.

OTHER HOUSING

Housing for other races is also acutely short. The Government, Rhodesia Railways and the mining corporations usually provide housing for their staffs but the expansion of staff has overtaken the rate at which houses can be built. The general public are assisted by a scheme whereby the Government lends funds to local authorities at favourable rates of interest from which loans may be granted to prospective house-owners. Since the scheme's inception some £400,000 has been made available by Government for these loans. A building society was also established in 1950 with Government backing. Three local authorities are preparing schemes of building houses and flats for letting to non-natives, and Government support has been promised in the form of loan funds.

BUILDING AUTHORITY

There has been no slackening in the demand for all types of buildings and the increase which commenced in 1948 has been maintained. The slight improvement in the building materials supply position which was noticeable at the beginning of the year was, unfortunately, not

maintained, and difficulties in certain lines, particularly roofing and iron and steel, are again becoming noticeable. The Construction of Buildings (Temporary Control) Ordinance, which was re-enacted for 1950, will continue during 1951.

Residences continue to receive first priority but offices, storage and factory buildings must also receive a high degree of priority as the need for these types of buildings is related to the general development of the Territory.

A comparison of the volume of building over the three years of control is shown in the following schedule:

Year	Total Value of Applications Approved	Residences	Commercial and Industrial	African Housing
	£	£	£	£
1948	2,672,926	1,964,435	708,491	—
1949	2,897,943	1,917,447	866,232	114,264
1950	3,111,875	2,010,754	939,382	161,739

Building costs continue to rise. A commission has been appointed by Government to inquire into the causes of these high costs and to make recommendations as to the measures which can be adopted for improving the position.

The following table sets out the permits issued up to 31st December, 1950:

BUILDING PERMITS GRANTED DURING JANUARY—DECEMBER, 1950. (Including Mine Townships.)

Month	Total Value of Applica- tions Approved	Residences	No. of Permits Issued	Per cent. of Total Value	Other Buildings	No. of Permits Issued	Per cent. of Total Value	African Housing	No. of Permits Issued	Per cent. of Total Value
1950	£	£		%	£		%	£		%
January	114,310	45,560	18	40	68,750	25	60	—	—	—
February	97,630	48,473	23	49.7	49,157	20	50.3	—	—	—
March	236,619	172,483	52	72.9	63,611	37	26.9	525	1	.2
April	300,227	245,147	99	81.65	54,200	28	18.05	880	1	.3
May	276,520	172,539	96	62	103,981	37	38	—	—	—
June	237,979	165,251	54	69	72,728	40	31	—	—	—
July	234,028	136,580	47	58.36	96,548	47	41.26	900	1	.38
August	209,174	86,293	37	41	120,881	40	58	2,000	1	1
September	332,378	236,514	108	71	93,010	38	28	2,854	6	1
October	349,640	285,850	140	82	53,710	37	15	10,080	24	3
November	486,487	258,159	100	53	83,828	37	17	144,500	1,349	30
December	236,883	157,905	59	67	78,978	20	33	—	—	—
	3,111,875	2,010,754	833	747.61	939,382	406	416.51	161,739	1,383	35.88
				= 62.3%			= 34.7%			= 3%

Proportion—Residential 62.3% ; Commercial and Industrial 34.7% ; African Housing 3%.

TELECOMMUNICATIONS

Telephone Exchanges.

A new 1,000-line automatic exchange was put into service at Lusaka during 1950, and a 50-line manual exchange was installed at Fort Jameson.

One hundred lines were added to each of the Kitwe, Livingstone and Ndola automatic exchanges, and a switchboard with five exchange connections and thirty subscribers' connections was installed at the Livingstone Airport.

Additional telephone distribution cables were provided at Broken Hill, Chingola, Kitwe, Livingstone, Lusaka, Mufulira and Ndola.

Farm Lines.

New farm lines were erected at Broken Hill and in the East Pemba area, and additional subscribers were connected to the existing system at Kalomo.

Trunk Routes.

Two open wire pairs were erected between Livingstone Airport and the Victoria Falls Bridge to provide private wire teleprinter services to the south.

Telegraphs.

New wireless telegraph channels were opened during the year between Abercorn and Sumbawanga (Tanganyika) and between Ndola and Pretoria. By the installation of new wireless stations the telegraph service was extended to Chinsali, Feira, Isoka, Kabompo, Mankoya, Mkushi, Mporokoso, Mumbwa and Serenje. New wireless stations were also installed at Chingola and Mufulira for the purpose of reducing congestion on the land lines. These additions brought the total number of wireless stations in the Territory to thirty-four.

COMPARATIVE STATEMENTS.

Telegrams.

		1949	1950
Forwarded	. .	269,070	299,704
Received	. .	255,069	300,023
Transmitted	. .	380,986	479,893
Totals	. .	905,125	1,079,620

Telephone Trunk Calls.

		1949	1950
Interna.	. . . . .	335,767	391,503
External :			
Outgoing	. . . . .	14,643	26,509
Incoming	. . . . .	11,010	18,189
		<u>25,653</u>	<u>44,698</u>
Totals	. . . . .	<u>361,420</u>	<u>436,201</u>

Chapter 11 : Communications

ROADS

The pattern of the road system of the Territory remained as in previous years and work during 1950 was directed to improving the alignment and standard of construction of certain roads, and maintaining the whole system in good condition.

The large construction programme of Class I (bitumen surface) roads under the development plan got into full swing during the year, and by September four firms of contractors and three departmental construction teams were engaged on nine sections of Class I work; the total value of the work now in hand when completed will be rather more than £1,300,000.

Besides the work on Class I construction one contractor was engaged on the construction of forty-seven miles of Class II (gravel surface) road and a small amount of work was done departmentally on the construction of Class III (improved earth) roads.

The work on Class I roads has been concentrated on formation and gravel base construction and no further lengths of completed carriageway have been opened to traffic. The mileage of completed Class I roads in the Territory therefore remains at 153 miles as in 1949. The mileage of completed Class II roads has been increased to forty miles and there has been only a relatively small increase in the mileage of Class III roads.

The Public Works Department was assisted in the large programme of Class I construction by a consulting engineer who also assisted with the supervision of the contracts.

The replacement of timber bridges on the Great North Road with bridges of permanent materials was continued and surveys and designs for a number of bridges were completed.

The estimated expenditure incurred in road construction and maintenance in 1950 was—

Road Construction	£318,580
Bridge and Culvert Construction	£12,400
Capital Grants to Road Boards	£12,740
Road Maintenance :	
Roads maintained by Public Works Department	£137,000
Roads maintained by Provincial Administration	£82,500
Roads maintained by Road Boards	£40,000
Rural Roads	£6,000
	<hr/>
	£609,220

CIVIL AVIATION

The *Air Pilot of Northern Rhodesia* (1950 edition) together with the *Air Law* (1951 edition) provide detailed information on aviation in Northern Rhodesia.

One international and three national airports lying along the north-south corridor route throughout the Territory provide customs, health and immigration controls as well as fuel, air traffic control, radio and radio navigation aids. In all, forty-two airfields are maintained, of which fourteen are constructed for use in all weathers.

Central African Airways provide both regional and internal scheduled services with a fleet of aircraft consisting of seven Vikings, five Doves and four Beavers.

They operate routes as follows:

(a) *Internal:*

- (i) Lusaka, Fort Jameson—thrice weekly each way (with additional weekly excursion to Monkey Bay);
- (ii) Lusaka, Livingstone—twice weekly each way;
- (iii) Lusaka, Mankoya, Mongu, Kalabo, Balovale, Livingstone—twice weekly;
- (iv) Lusaka, Broken Hill*, Ndola, Kasama, Abercorn—five times weekly each way.

* Flagstop.

(b) *Regional Services:*

- (i) Johannesburg, Salisbury, Lusaka, Ndola, Kasama/Abercorn, Tabora, Nairobi;
- (ii) Johannesburg, Livingstone, Lusaka, Ndola—twice weekly each way;
- (iii) Johannesburg, Blantyre, Dar-es-Salaam, Nairobi—twice weekly;
- (iv) Fort Jameson, Lilongwe, Blantyre—twice weekly.

East African Airways connect Fort Jameson with Nairobi and Salisbury and Blantyre twice weekly.

Zambesi Airways is, at present, the only charter operator in the Territory and is based at Livingstone, using Rapides, Fox Moth and Fairchild aircraft.

The Northern Rhodesia Flying Club retains its main activities on the Copperbelt but with zonal branches at Lusaka and Livingstone.

The main feature of the work of the Department of Civil Aviation during the twelve months has been the implementation to a large degree of the standards, procedures and specifications laid down by the International Civil Aviation Organisation, where these apply, throughout the Territory of Northern Rhodesia.

An outstanding landmark in the progress achieved during 1950 was the completion of the full-scale international airport at Livingstone, mentioned in Chapter 10. This ideally situated and well-equipped airport is already a regular scheduled stopping place on the direct trunk airline route from Europe to the Union of South Africa via the West Coast. This led to the replacement by fast-scheduled landplanes of the former flying boat service to Johannesburg by British Overseas Airways Corporation. New four-engined "Hermes" type aircraft have cut the cost of operation and the flying time from the United Kingdom to economic figures. Whilst some may regret that passing of the more leisurely "Hythe" and "Solent" class boats, the inauguration of this landplane programme sets a new level in speedy passenger travel without any reduction in comfort. Livingstone is reached within approximately twenty-six hours of leaving London Airport. The official opening was a memorable occasion. A remarkably good flying display was given by the Royal Air Force, South African Air Force and the Southern Rhodesian Air Force, and excellent demonstrations of various types of aircraft were witnessed by a large crowd. The event roused considerable interest in the world Press and was favourably commented upon. All praised the initiative and determination behind the project, and topical British and American films featured the opening as one of the major news items of the year.

Before the close of the year, scheduled services as well as long distance charter operations and Royal Air Force Transport Command were using the airport. There are indications that other foreign scheduled service operators are extremely interested and intend to make use of this airport.

The introduction of the Colonial Air Navigation Order during 1950 and the subsequent regulations necessitated by the Order in Council have been compiled, published and enforced. The institution of the new series of International Civil Aviation Organisation standard operating licences for aircrews and ground staff was proceeded with during 1950, and the issue to applicants began in December.

The Department was represented at the Special Fixed Communications Meeting of the International Civil Aviation Organisation which was held in Paris during March, 1950. A plan for the reorganisation of

the Aeronautical Fixed Telecommunications Network in Africa was agreed upon. This involved the Territory in participation in three additional networks. The Northern Rhodesian stations of Ndola, Lusaka, Livingstone and Mongu were nominated as minor communications centres.

Salisbury, in Southern Rhodesia, continues to be the sub-area communication centre for the region.

A plan was formulated to provide teletype links between Livingstone-Bulawayo-Salisbury-Johannesburg, and in addition Lusaka-Salisbury and Lusaka-Ndola. The Livingstone-Salisbury-Bulawayo link will be in operation by January, 1951, and the remaining links should be in operation in early 1952. This arrangement will give three of the main Northern Rhodesia airports direct access by teleprinter to the flight information centres—a very satisfactory state of affairs.

The following publications were prepared, compiled and published:

Air Pilot of Northern Rhodesia, 1950.

Aerodrome Maintenance Manual.

Construction, Use and Operation of Fire Extinguishers Provided on Airports.

General Fire Orders.

Duties and Responsibilities of Officers of the Department.

POSTS

Postal agencies were opened at Katete (Eastern Province), Maramba (Livingstone) and Mwandi (Barotse Province) during 1950, bringing the total number of post offices in the Territory to sixty-one.

The volume of mails increased by 11 per cent. over the previous year, the total number of postal articles being 25,032,690.

The British Overseas Airways Corporation introduced the Hermes service in November on the South Africa route, the machines landing at the new Livingstone airport. This resulted in a considerable improvement in the exchange of air mails with the United Kingdom.

An internal air mail parcel service was introduced in August and similar services were established with the United Kingdom and Southern Rhodesia.

The new African Learners' School was opened in November. The school is fully equipped for training in all branches of postal and telegraph work and is capable of accommodating fifty learners.

Money order and postal order transactions continued to increase, comparative details of which are given below:

		1949		1950	
		Number	Amount	Number	Amount
Money Orders :			£		£
Issued	. .	16,912	193,239	20,446	245,808
Paid	. . .	7,148	76,994	9,124	105,960
Postals Orders :					
Issued	. .	303,823	224,078	379,092	282,589
Paid :					
British	. .	109,017	76,594	123,639	90,661
Union of South Africa		50,395	43,781	59,047	48,539

Chapter 12 : General

LANDS

The flow of applications for township plots continued unabated during 1950, the biggest demand being for residential sites. In most towns the lack of municipal or township services limits the number of sites which can be leased at present, but progress is being made in providing extra pumping facilities for water and increased electrical power.

During the year the Southern Rhodesia Town Planning Department took over the planning of Lusaka in addition to the towns where planning had already been started. Because of this, it was not possible to plan as many small towns as had been hoped, but a start was made with the planning of Kalomo. Town planning authorities were appointed for Broken Hill and Lusaka to prepare final development plans and similar authorities will soon be appointed for Fort Jameson, Kitwe, Chingola, Mufulira, Luanshya and Livingstone.

Lusaka's rapid expansion and development has necessitated the purchase by Government of 5,039 acres of privately owned land in the environs of the town, at a cost of £173,307. An interesting feature of these transactions was that this was the first occasion on which Government has had to resort to the High Court for a determination under the Public Lands Acquisition Ordinance as to the amount of compensation to be paid to the expropriated owners.

The number of applications for agricultural land in 1950 was about the same as in 1949 and about 325,000 acres of virgin land were leased for settlement purposes. The demand for residential and agricultural smallholdings on the Copperbelt continues and next year it is intended to lay out further blocks of residential smallholdings within reach of the major towns.

Almost all the Crown land available for farming along the railway line has now been leased, only a few blocks suitable for tobacco remaining. During 1951, it is intended to lay out and alienate a number of farms in the Mkushi Block, some seventy miles from the existing line of rail.

SURVEYS

Due to the lack of qualified surveyors, surveys done departmentally were again confined almost exclusively to townships, where 759 plots were surveyed, 603 of which were for residential purposes, the remainder being business or industrial sites. For the first time a firm of land surveyors from the Union of South Africa was employed to survey farms leased by the Crown. The survey of these farms was of great assistance, but it is worthy of notice that the number of farms so surveyed was exceeded by the number of new leases granted so that, despite this help, the position regarding the arrears of land to be surveyed is worse than before.

The fact that lessees of these unsurveyed farms are developing their farms without knowing their boundaries is a matter of grave concern because not only is this leading to disputes between adjoining owners but it endangers their security of title.

For the first time in many years private surveyors operated in the Territory on their own account, mainly on the subdivision of privately owned land near Lusaka into small plots for residential purposes.

African surveyors trained at the school in Broken Hill have done some useful work during the year. They were employed chiefly on boundary demarcations, contour surveys and topographical surveys of outlying townships.

Surveyors of the Directorate of Colonial Surveys carried out a controlling triangulation in the Northern Province and when the results of their work are available it is hoped to produce more maps from the air photographs already taken by the Royal Air Force.

The Directorate of Colonial Surveys have produced forty-nine map sheets from air photographs. These maps cover part of the Zambezi Valley and the Mkushi Block and are to the scale of 1: 50,000. The production of other sheets in this series is limited to areas where ground control is available, but nineteen sheets covering most of the Copperbelt and a small area near Livingstone were drawn departmentally.

INFORMATION DEPARTMENT

Important developments took place in the activities of the Information Department during the past year.

The number of Press *communiques* issued in 1950 totalled almost 1,000, an increase of 84 per cent. over the previous year's figure. These *communiques* were extensively used in the local Press, and

greatly increased space was given to Northern Rhodesian news, both in the South African and British newspapers. The number of feature articles used by newspapers and periodicals in South Africa and the United Kingdom also showed a big increase.

The publication of the African newspaper *Mutende* continued on a weekly basis. Although circulation figures dropped owing to the doubling of subscription rates to cover a weekly issue and the closing of several agents' accounts which had fallen into arrears, efforts were made during the year to find new agents on the Copperbelt and elsewhere who would make *Mutende* more readily available to the casual reader.

The Central African Broadcasting Station at Lusaka continued to broadcast to Africans in the two Rhodesias and Nyasaland with a three and a half-hour programme daily. A further grant of £40,000 will enable the Department to install the necessary apparatus to enable broadcasts to be made in up to five languages simultaneously. During the year the distribution of the " Saucepan " radio was handed over completely to the trade, although the Department continued to train Africans as radio mechanics. At the end of their training they were transferred to wholesale and retail stores at strategic centres. In March an experimental rediffusion system for Africans was installed in Lusaka with satisfactory results. The Department supplied material for the European broadcasts made from the Salisbury station in Southern Rhodesia.

There were fewer interruptions to the itineraries of the Information Department's mobile cinemas since the petrol supply position was better than it was in 1949. As a result of the more regular operation of the cinema vans, revenue rose from £1,600 in 1949 to £2,500 in 1950. The Eastern and Central Province vans were completed at the beginning of the year and operated well throughout the year.

Ten Gazettes, two News Reels and seven documentaries were completed in 1950 and film work was carried out on nine more productions. News material taken with 35 mm. film was accepted by the commercial news reel companies in England and material was also accepted by the British Broadcasting Corporation for television. Ninety new films were added to the film library but there was no substantial increase in the total number of films owing to the necessity of discarding films that had become worn out. The number of subscribers at the end of 1950 had risen to 128.

Assignments completed by the Department's photographic section totalled 228 for the year. Twenty-three were undertaken in the studio and 203 in the field. During the year nearly 150 pictures were

published in the British Press as pictorial features, cover pictures, illustrated articles and news pictures. Photographs totalling nearly 400 were also published in local, Southern Rhodesian and South African papers and periodicals. Seven film-strip sets were completed during the year.

The scope of tourist publicity work increased to such an extent in 1950 that it was necessary to supplement the staff of the Tourist Office at Livingstone. Nearly 5,000 inquiries were dealt with during the year and close liaison was maintained with travel agencies in all parts of the world. A number of brochures were produced for publication and the Tourist Officer conducted all arrangements for the Government's big game safari scheme.

By far the most important event during the year for the Information Department was the opening of the new Livingstone international airport in August. As a result of the combined efforts of all sections Northern Rhodesia received world-wide publicity and the cine-cameramen created a record for the Department by having their material accepted by four of the five commercial newsreel companies in Britain.

PUBLICATIONS BUREAU

The Northern Rhodesia and Nyasaland Publications Bureau, a counterpart of the East African Literature Bureau, has carried on since 1948 the work of arranging to publish and distribute books of general interest for Africans which had formerly been undertaken by the Northern Rhodesia Literature Committee and the Nyasaland Education Department. It is largely financed from Colonial Development and Welfare Funds. Its main objects are to encourage African authors; to create, mainly by providing for it, the love of books and the habit of reading for pleasure; and to lay the foundations of a healthy independent book trade.

The scope and volume of work entailed in the preparation of manuscripts for publications surpasses the personal resources of the staff and a good proportion of their time is spent in arranging to utilise and remunerate the expert services of others, linguists, artists, typists, men of letters.

During 1950 eighteen titles and over 80,000 volumes were produced, slightly fewer than in 1949. Two hundred and twenty-five manuscripts were submitted, more than double the number in 1949: many of them have been prepared for publication and should appear in 1951.

Research into the popularity of different books with a view to producing what people like and will buy, is one of the most important parts of the work. Usually there is nothing more scientific than a friendly discussion with a group of Africans. However during 1951, there is to be an inquiry which Dr. J. C. Mitchell of the Rhodes-Livingstone Institute is undertaking, on sociological and statistical lines, in the Copperbelt of Northern Rhodesia.

Negotiation with publishers forms a large part of the Bureau's routine: many of the books are published by British firms of tradition and enterprise, such as Longmans, the Oxford University Press and Macmillans: through the constant correspondence particularly necessary at this experimental stage the Bureau is able to draw on their funds of experience and understanding, taste and business acumen.

A system of guarantees for sales of a minimum number of copies of each edition has been worked out with far-reaching results. An important side of the work consists in calculating and watching these guarantees and keeping a check on production and expenditure in relation to sales. This work is closely associated with and dependent on the accounting which covers the publication, costing, subsidising (where necessary) and wholesaling of books on a system evolved to fit the unusual position of a government department with one foot in trade. Sound commercial principles have to be very considerably adapted, but are never discarded in favour of spoon-feeding or putting up "a good show".

Thus the building up of a satisfactory distribution system is perhaps the greatest problem. The large areas involved, the still considerable proportion of illiteracy, and above all the fact that the habit of reading for pleasure has not been established, constitute obstacles that can only be overcome gradually. In Northern Rhodesia marketing is in the hands of the United Society for Christian Literature. In Nyasaland distribution is managed by the Bureau's Business Assistant but on commercial lines. In both countries branches and agencies are being set up not only in the towns but also in the rural areas, and the safe school trade is used as support for the expansion of sales to the public.

DEPARTMENT OF GAME AND TSETSE CONTROL

The Kafue National Park, covering some 8,650 square miles, was declared in April, 1950. The park is being kept closed to the public for a five-year development period, and considerable progress was made during the year in the construction of roads, and camps for the staff. No changes were made in game reserves, which number eleven

covering 9,858 square miles, but several new controlled areas were declared. Game conservation measures were maintained, particular attention being paid to enforcement of control in the Game Reserves and Controlled Areas. During the year the Department inaugurated a conducted hunting party system in the Luangwa Valley, and the two parties which were catered for expressed great satisfaction with the hunting facilities afforded. A small tourist camp was established on the banks of the Luangwa River in the area of Chief Nsefu, who voluntarily prohibited all hunting in the region, and the quantity and variety of game to be seen attracted many visitors.

A second Vermin Control Officer was appointed, to operate in the Southern Province, and the Central Province Vermin Control Officer again achieved very good results in the farming area.

Tsetse control operations were expanded during the year. In the Kafue (North Bank) Cattle Area Scheme fencing was completed, and marked reduction of fly has occurred in the protected area. At Feira some population movement was effected in the Zambezi region, and game elimination continued both there and on the Luangwa front. The future of both schemes awaits administrative decisions in regard to population resettlement.

At Kalomo operations were started to push the fly infestation away from the borders of the farming area, by a process of discriminative clearing, and preliminary results are encouraging. At Abercorn the Department maintained the area cleared of *Glossina mortisans* by the East African Tsetse and Trypanosomiasis Research and Reclamation Organisation, which was taken over from the latter in 1949, and continued lake-shore clearing against *Glossina palpalis* at Lake Tanganyika. Several surveys were carried out to plot the limits of fly infestation in areas where demand was made for control measures to be instituted.

Natural History.

Members of the Department continued to collect birds and other zoological specimens for study purposes, co-operating in this with the National Museum of Southern Rhodesia at Bulawayo.

RHODES-LIVINGSTONE INSTITUTE

In 1950 the Rhodes-Livingstone Institute continued the research projects begun in earlier years, and the new research scheme was begun. The Institute received a grant from the Colonial Development and Welfare Fund, which, together with increased annual donations from various private companies and the Northern Rhodesia Government, enabled the trustees to envisage and plan a research scheme

for a five-year period. This grant became operative in 1950, and incorporated the grants which financed the existing research programmes.

The Director, Dr. Elizabeth Colson, spent the first half of the year working through material on Tonga economic life. She arranged with Miss Deane, an economist formerly attached to the Research Branch of Colonial Office, to write a joint paper analysing Tonga budgets. The other material collected will be worked into a general book on the interplay of economic change and social organisation, which she will complete during her leave period. In September, Dr. Colson proceeded on leave to the United States of America. She will remain in America until early in the new year, and will then proceed to the University of Manchester where she will analyse her material on the Tonga. Dr. Colson has accepted a contract for a further three and a half years with the Rhodes-Livingstone Institute, and will return to Africa in September, 1951.

Dr. J. C. Mitchell, the sociologist, had permission from the trustees to remain in England to finish his report on the Yao and to study work being done in urban sociology. On his return to Africa he spent several weeks in the Union where he discussed urban research with specialists in this field, and began his work on the Copperbelt at the end of July. The trustees offered Dr. Mitchell an honorarium to undertake the supervision of research officers for consultative purposes in the absence of the Director.

Dr. Mitchell wrote an analysis of the Yao village and its role in social organisation, which he submitted to Oxford University as a thesis for his doctorate in anthropology. This degree was awarded to him in July, 1950.

An administrative secretary was appointed in July, to undertake the administration of Institute affairs in the absence of the Director. Miss M. B. Hyam accepted a contract for a tour of one year.

Mr. I. G. Cunnison, the anthropologist appointed to the study of the Luapula area, proceeded to England to analyse the material collected during his first field tour. He worked in England from October, 1949, to May, 1950, and after attending staff conference in Bulawayo he returned to the Luapula area for a second tour in July, 1950. He is due to proceed on leave in May, 1951, but has been permitted by the trustees to spend several months of his leave period in completing a year's investigation of the Luapula fishing industry.

Mr. V. W. Turner, an anthropologist, was appointed under the new Colonial Development and Welfare Scheme to undertake

research amongst the Lunda-Lovale. He arrived in Rhodesia on 13th November, and proceeded to Mwinilunga, where he intends working amongst the Lunda and at a later date he will establish his headquarters at Balovale.

Miss M. Pearsall was another anthropologist appointed under the new Colonial Development and Welfare Scheme to undertake a study of the Lakeside Tonga in Nyasaland. Miss Pearsall will arrive in Africa from America in March, 1951.

Mr. L. H. Gann was appointed under the new Colonial Development and Welfare Scheme for a tour of two years as historian. He obtained the trustees' permission to study Central African history at the University of Oxford and collect material from Colonial Office until April, 1951, when he will proceed to Salisbury and work in the Archives.

Miss M. Elliott, an economist whose contract was due to expire in June, was granted an extra six months in which to collate and record her material. Her contract will expire on 8th January, 1951, from which date she will proceed on leave.

Beit Research Fellows. Dr. J. F. Holleman returned to the field among the Shona people, and will continue his research among these people. He expects during this tour to cover a number of different Shona areas to determine the extent of variation in culture and organisation with the Shona group.

Dr. Holleman was awarded the degree of Doctor of Philosophy at the University of Cape Town in 1950. His book *Shona Customary Law* is being published by the Oxford University Press.

Mr. A. J. B. Hughes arrived in Northern Rhodesia on the 1st February, 1950. He is undertaking research amongst the Ndebele, and during 1950 he worked in the Shangani Reserve, near Nkai. He will proceed to Natal University in March, 1951, for his first writing-up period.

THE RHODES-LIVINGSTONE MUSEUM, LIVINGSTONE

The Rhodes-Livingstone Museum was founded in 1930 as a collection of objects of African material culture, and was housed in the office of the Secretary for Native Affairs, at that time in Livingstone. In 1934 His Excellency Sir Hubert Young gave the collection its first home in the old Magistrate's Court and conceived the idea of extending the collections to become a memorial to David Livingstone. Later, through private benefactors and purchases, a representative collection of Livingstone's letters and other objects of personal interest were

acquired. From their first temporary home the collections were moved into the former United Services Club buildings early in 1937. In the same year the Rhodes-Livingstone Institute was founded by Sir Hubert Young to undertake sociological research in Central Africa, and the Museum was incorporated in that institution and administered as part of the Rhodes-Livingstone Trust.

During the war years the Museum's activities were cut to a minimum owing to absence of staff, but in the course of the first eight years of the Museum's existence as part of the Trust, the collections were very considerably enlarged, cases for display purposes were acquired, and the work of the Museum and Institute developed to such an extent that the Trustees decided in December, 1945, to separate the two institutions. From the 1st January, 1946, therefore, the Museum has been administered separately under its own board of trustees. At the same time it was recognised that the provision of a new building with adequate display, storeroom, and workroom facilities was a necessity. A building fund was accordingly opened and £25,500 subscribed by the Northern Rhodesia Government and commercial concerns with interests in the Territory. Owing to delays in obtaining building materials work was not started until the middle of 1949, but the building will be ready for occupation by the end of 1950. The foundation stone was laid on the 28th of January, 1950, by Colonel Sir Ellis Robins, D.S.O., E.D., one of the museum trustees. It is expected that the opening of the new building will take place approximately six months after its completion.

The details of the Museum policy will be found in the memorandum by the Curator, *The Museum as a Public Service*. The Museum is planned to be not only the focus of Museum research, and a valuable localised collection, but also a disseminating centre for educational exhibits to be sent throughout the Territory. A Beit Trust grant has already enabled an educational programme to be started, which will bring aspects of the Museum within reach of European and African schools throughout the Territory. After 1950 this programme is to be financed by the two Education Departments concerned. Subject specialisation has been adopted both by reason of limitation of staff and of funds. The Museum has, therefore, adopted as its purpose and educational programme the interpretation of the history, development and present status of Man in Northern Rhodesia. It is confidently expected, however, that increase of staff will make it possible for the Museum to enlarge its scope to include taxonomic collections, particularly in the fields of geology, zoology and botany, and more detailed research on ethnography. As a start it has been decided to appoint an ethnographer in 1951.

The Museum contains an exceptionally fine collection of original letters of David Livingstone, the explorer's sketch book on the Zambezi Expedition of 1860, copies of his maps as well as a fully representative collection of early maps of Africa. A new original map and letter of David Livingstone were purchased during 1949, and a letter of H. M. Stanley's in 1950. The ethnological collections contain many objects now irreplaceable owing to the rapidly changing material culture, under European influence, of the African tribes inhabiting the Territory. These collections are rapidly becoming expanded owing to the need to collect all possible material and data before it is too late. During 1949 an important collection of material culture was made from the last remaining groups of Hukwe Bushmen in the Sesheke district. The archæological collections, the result of the Museum's research, form the basis for correlation work between East and South Africa.

Research is carried out in ethnography and archæology, and the Museum publishes a series of Occasional Papers and intends shortly to republish its technological handbook.

PART III

Chapter 1 : Geography and Climate

The Protectorate of Northern Rhodesia lies on the plateau of Central Africa between the longitudes 22° E. and $33^{\circ} 33'$ E. and between the latitudes $8^{\circ} 15'$ S. and 18° S. Its area is 290,323 square miles, and its boundaries are 3,515 miles in length.

Its neighbouring territories are Angola (Portuguese West Africa) on the west, the Belgian Congo on the north and north-west, Tanganyika Territory on the north-east, Nyasaland on the east, Portuguese East Africa and Southern Rhodesia on the south-east and south and the Caprivi Strip of South-West Africa on the south. The Zambezi River forms the boundary of Northern Rhodesia on the south for about 520 miles, separating it from the Caprivi Strip and Southern Rhodesia, whilst the Luapula River forms another natural boundary between the Protectorate and the Belgian Congo, along the northern edge of the Congo Pedicle and north as far as Lake Mweru, for a distance of about 300 miles. The remaining boundaries follow watersheds and occasional streams or are marked by beacons across land areas.

With the exception of the valleys of the Zambezi, the Luapula, the Kafue and the Luangwa Rivers the greater part of Northern Rhodesia has a flat to rolling topography, with elevations varying from 3,000 to 5,000 feet above sea level, but in the north-eastern districts the plateau rises to occasional altitudes of over 5,000 feet. In many localities the evenness of the plateau is broken by hills, sometimes occurring as chains which develop into areas of broken country. The highest group of hills is the Muchinga Mountains which form part of the Great Escarpment running down the western edge of the Luangwa River Valley, and of these, individual peaks rise to about 8,000 feet.

On the whole the Territory is well wooded, even the crests of the highest hills bearing trees and orchard-like bush. Hundreds of square miles of country lie under tall grass along the Kafue in an area known as the Kafue Flats, in the Barotse Plains near the Zambezi and also over a large area south of Lake Bangweulu. These open grassy spaces, for the most part, contain swamps in which the water level fluctuates

with the rainy seasons. The southern and central districts comprise areas where sparse bush alternates with grass lands in which farming and ranching have developed.

A glance at a large-scale map suggests that the Territory is well watered, but many of the smaller rivers shown have a seasonal flow and dry up after the rains. The larger rivers, the Zambezi, Kafue, Luangwa, Chambeshi and Luapula, together with their larger tributaries, have an all-year-round flow. The three great lakes of Northern Rhodesia are Lake Bangweulu in the northern districts and Lakes Mweru and Tanganyika on the northern boundaries. Lake Bangweulu and the swamps at its southern end cover an area of about 3,800 square miles, and there are a number of other much smaller lakes such as Lake Young in the Mpika District, Lake Chila near Abercorn, Lake Chirengwa near Ndola and Lusiwasi Lake (or Lake Moir) off the Great North Road to the north of Serenje. Northern Rhodesia has the greatest waterfall in the world, the Victoria Falls, on its southern boundary and the highest waterfall in Africa, Kalambo Falls, 704 feet, on its northern border.

Although Northern Rhodesia lies within the tropics, and fairly centrally in the great land mass of the African continent, its elevation relieves it from the extremely high temperatures and humidity usually associated with tropical countries. The lower reaches of the Zambezi, Luangwa and Kafue rivers in deeper valleys do experience high humidity and trying extremes of heat, but these areas are remote and sparsely populated.

The year may be conveniently divided into the rainy season, the winter months and the hot season. The rains occur between November and April and are copious while they last, varying from an average of twenty-five to thirty inches a year in the south to over fifty inches a year in the north. For the most part the rains fall in a series of thunderstorms and showers with only rare periods of continuous rain over several days. Even during the rains a fair amount of sunshine is recorded.

During the winter months—May to August—fair, cool weather with a moderate breeze is the general rule. Night temperatures are low, and ground frost occurs quite frequently in sheltered valleys. Day temperatures are comfortably warm, except on occasional grey cloudy days.

The hot season is short, the months of October and November being the hottest, when day temperatures go up to 80 to 100 degrees, depending upon locality. Towards the end of the hot season night

temperatures tend to rise and there is a generally oppressive feeling in the air which is only relieved by the advent of the rains.

The following table gives the average minimum and maximum temperatures and dewpoints at six stations of varying altitudes for three representative months.

	January			July			October		
	Max. Temp. °F.	Min. Temp. °F.	Dew- point °F.	Max. Temp. °F.	Min. Temp. °F.	Dew- point °F.	Max. Temp. °F.	Min. Temp. °F.	Dew- point °F.
Abercorn, 5,454 ft. .	76	59	60	77	51	47	84	60	51
Kasama, 4,544 ft. .	79	61	63	76	50	48	88	62	50
Lusaka, 4,191 ft. .	78	63	64	73	50	44	88	64	49
Fort Jameson, 3,756 ft. .	81	65	64	77	53	49	90	67	54
Livingstone, 3,161 ft. .	84	66	66	79	45	42	95	67	52
Luangwa Bridge, 1,324 ft.	89	72	72	85	54	51	101	74	57

Chapter 2 : History

Relics of prehistoric man have been found in Northern Rhodesia, in particular the skull of *Homo rhodesiensis* in the Broken Hill Mine, and Stone Age culture around the Victoria Falls. At a rough estimate they suggest human occupation at anything between 20,000 and 50,000 years ago, though an exhaustive examination of all possible areas has yet to be undertaken. The early history of Northern Rhodesia is fragmentary and can only be gleaned from tribal histories, which are subject to doubt, since they are passed down by word of mouth from generation to generation, and from the accounts of the few explorers who penetrated the "Dark Continent" from the east and west coasts.

The Portuguese Governor of Sena, Dr. Lacerda, encouraged by the report of the half-breed Fereira who returned from Kasembe's capital, close to the eastern shores of Lake Mweru, in June, 1798, left Tete for the north. He was accompanied by Fathers Francisco, Jose and Pinto, twelve officers and fifty men-at-arms, but failed to reach his goal, and died within a few miles of Kasembe's capital. Father Pinto led the remnants of the expedition back to Sena, and it is from Dr. Lacerda's diaries, which Father Pinto with great difficulty saved, that the first authentic history of what is now North-Eastern Rhodesia is taken. Dr. Lacerda was followed in the early nineteenth century by two Portuguese traders, Baptista and Jose, who brought back stories of the great interior kingdom of the Lunda, which extended from Lake Mweru to the confines of Barotseland and included the whole of the country drained by the Upper Congo and its tributaries. This kingdom is reputed to have lasted from the sixteenth to the nineteenth century. Very few historical facts are known about it, but the name of Mwatiamvwa or Mwachiamvwa, the dynastic title of the paramount chief, is associated, like Monomotapa, with many half-legendary stories. Neither of these expeditions was of any great geographical value, and it was not till 1851, when Dr. Livingstone made his great missionary journeys and travelled through Barotseland and in 1855 discovered the Victoria Falls, that the civilised world had its first authentic information of Northern Rhodesia. Other and later explorers who brought back stories of the barbarism of the natives, of the wealth of game, and of the glories of the Victoria Falls, were Serpa Pinto, Cameron, Selous and Arnot.

From the very early days when the hordes of migratory Bantu swept southwards from Central and Northern Africa, Northern Rhodesia has been subject to constant invasion from stronger tribes on its borders, so much so that the vast majority of the present native population, though of Bantu origin, is descended from men who themselves invaded this country not earlier than A.D. 1700. One or two small tribes, numbering now only a very few thousand, such as the Subia on the Zambezi, are all that remain of the inhabitants of Northern Rhodesia prior to that date. Though the story of these invasions has passed into oblivion, their traces remain in the extraordinary number and diversity of races and of languages in the country.

At the present time the population of the Territory has been classified into seventy-three different tribes, the most important of which are the Bemba, Ngoni, Chewa and Bisa in the north-eastern districts, the Lozi, Tonga, Luvala, Lenje and Ila in the north-western districts, and the Senga, Lala and Lunda, sections of which are resident in both the eastern and western areas. There are some thirty different dialects in use, but many of them vary so slightly that a knowledge of six of the principal languages will enable a person to converse with every native of the country. Nyanja is in use as the official language of the police and of the Northern Rhodesia Regiment, and is probably the language most generally spoken by Europeans. In many instances the tribes overlap and encroach upon each other, and it is not uncommon to find a group of villages of one tribe entirely surrounded by villages of another tribe. Many of the tribes on the borders extended into neighbouring territories; in some instances the paramount chief resides in a foreign country and only a small proportion of the tribe lives in Northern Rhodesia.

The chief invaders of the early part of the nineteenth century were the Arabs from the north, the Ngoni, a branch of the early Zulus who fled from the oppressive tyranny of Tschaka and who settled in the north-east of the Territory, and the Kilolo, an offshoot of the Suto family, who in the beginning of the nineteenth century fought their way from the south through Bechuanaland and across the Zambezi under the noted Chief Sebitoani; they conquered the Toka, the Subia, and the Lozi and founded a kingdom which was distinguished by a comparatively high degree of social organisation.

The duration of the Kilolo kingdom was short, lasting between twenty and thirty years. Soon after the death of Sebitoani, the Lozi rebelled and massacred the Kilolo to a man, keeping their women. As a result of this the influence of their occupation is still to be seen in the Kilolo language, which is largely spoken amongst the tribes near the

Zambezi. The Lozi under Lewanika enlarged their kingdom by conquering several surrounding tribes, such as the Nkoya, the Lovale and the Toka. Beyond these limits their authority was both nebulous and ephemeral.

In the year 1891 Lewanika was informed that the protection of Her Majesty's Government had been extended to his country as he had requested that it should be, and on 17th October, 1900, the Barotse Concession was signed by him and his chiefs and representatives of the Chartered Company. The concession was confirmed in due course by the Secretary of State for the Colonies, and under its terms the Company acquired certain trading and mineral rights over the whole of Lewanika's dominion, while the paramount chief was to receive, among other advantages, an annual subsidy of £850.

During this time the slave trade established by the Arabs continued unchecked. Its baleful influence had gradually spread from the shores of Lake Nyasa and Tanganyika over the whole Territory; but with the establishment of a Government post at Abercorn in 1892 the slave trade in this part of Africa received its first serious check. In each succeeding year more Arab settlements on the lake shore were destroyed. Sir Harry Johnston defeated the Arab chief Mlozi at Karonga in 1894, and the last caravan of slaves, which was intercepted on its way to the east coast, was released at Fort Jameson in 1898. Even after that, bands of slave-raiders were occasionally encountered on the north-east boundary and skirmishes with them took place as late as 1900; but with the final establishment of the administration of the British South Africa Company the slavers quickly disappeared from the country. The status of the conquered tribes under Lewanika's dominion was that of a mild form of slavery. This social serfdom was brought to an end by the edict of Lewanika, who in 1906 agreed to the emancipation of the slave tribes.

Before 1899 the whole Territory had been vaguely included in the Charter granted to the British South Africa Company, but in that year the Barotseland-North-Western Rhodesia Order in Council placed the Company's administration of the western portion of the country on a firm basis. It was closely followed by the North-Eastern Rhodesia Order in Council of 1900 which had a similar effect. The two territories were amalgamated in 1911 under the designation of Northern Rhodesia, and the administration of the Company (subject to the exercise of certain powers of control by the Crown) continued until 1924. In that year the administration of the Territory was assumed by the Crown in terms of a settlement arrived at between the Crown and the Company, and the first Governor was appointed on 1st April, 1924.

In the years that followed came the development of Northern Rhodesia's great copper industry. A bad start with the Bwana M'kubwa crash, one of the biggest mining fiascos in African history, was prelude to a brilliant future. The Territory's four big mines at Luanshya, Nkana, Mufulira and Nchanga came into production shortly after Bwana M'kubwa collapsed in 1930. These four mines have altered the entire economic outlook of the Protectorate. A country whose progress rested on an annual revenue of about half a million pounds in a few years was netting ten million and more annually, and building up reserve funds of several million pounds. It is largely upon copper that the new schools, hospitals, roads and other recent witnesses to increasing prosperity are founded.

Chapter 3 : Administration

CENTRAL ADMINISTRATION

The constitution of Northern Rhodesia provides for an Executive Council and a Legislative Council. There is a majority of Unofficial Members over Official Members in the Legislative Council.

The Legislative Council is presided over by a Speaker and contains nine Official Members and fourteen Unofficial Members, of whom four are nominated to represent African interests. Two of these are Africans.

The Executive Council is presided over by the Governor and in 1950 consisted of seven Official Members and four Unofficial Members. One of the Unofficial Members of Executive Council represents African interests.

LOCAL ADMINISTRATION

The system of indirect rule is in force, under which Native Authorities with their own Treasuries are constituted with powers defined by statute. The Native Authorities can make orders, subject to the veto of the Provincial Commissioner, which have the force of regulations under the law. Such orders are made on minor matters affecting the welfare of the area concerned, markets, agriculture, forestry, game conservation, and so on. The Native Authorities can also make rules, subject to the approval of the Governor, such rules constituting more important local legislation for the peace, good order and welfare of the people of the area concerned, and including the levying of local rates and fees. Recently many Native Authorities have levied rates for such objects as education and the upkeep of roads.

The Provincial Councils instituted in 1943 continued to prove their use as vehicles of African opinion. The standard of the debates improved and their scope widened to include a large variety of topics of all degrees of importance. These Councils consist of Chiefs and Native Authority Councillors selected at tribal gatherings and at urban advisory councils. Thus all elements of the African community are represented. They are at liberty to raise and debate any matter they

wish. Their functions are advisory but Government pays careful attention to the views and wishes expressed. It is gratifying to note how well the tribal elders and the most advanced elements mix and debate matters of general interest. From these councils, five in number, and from Barotseland, delegates are elected to attend an African Representative Council for the Territory, where the procedure is as nearly as possible that of Legislative Council.

In 1948 two African Members were appointed to Legislative Council by the Governor. They were selected by the African Representative Council from among its members by secret ballot.

LOCAL GOVERNMENT

Councils and Boards with local government powers and duties have been constituted for the leading towns since the earliest days. There are two Municipal Councils and thirteen Township Management Boards, the distinction being one of dignity and comparative powers. Five African Township Management Boards were also formally established in 1949 with local government powers over certain African suburbs in the Copperbelt. All major authorities will have elected majorities by 1951. The franchise derives from the ownership or occupation of rateable property, but in December legislation was passed abolishing plural votes resting on the possession by one person or company of a number of valuable properties.

All Councils and Boards are authorities under Public Health legislation, can raise rates, borrow moneys, own and manage housing schemes and are in control of roads and public services in their areas. They are not responsible authorities for education or medical services but are advisory on town planning and land matters. The Councils of municipalities may make by-laws and raise loans from sources other than the Government. Township Management Boards borrow all funds from the Government and work under Townships Regulations enacted by the Governor in Council on which, however, they are closely consulted. It has been the Government's policy to foster and encourage local autonomy and initiative by extending the powers of local authorities.

The gross revenue and expenditure of all local authorities in 1950 was in the neighbourhood of £382,000, the total loan indebtedness, consisting almost entirely of loans from the Government, is approximately £925,000. An indication of the growth of local government activities and responsibilities in the past few years is the fact that these figures are more than double those of five years ago. The

gross revenue and expenditure and outstanding loan liabilities of local authorities for the period 1944 to 1950 are as shown below:

	Gross Recurrent Revenue £	Gross Recurrent Expenditure £	Loan Liabilities £
1945 . .	170,562	162,705	250,662
1946 . .	188,689	182,029	291,510
1947 . .	226,995	220,009	357,935
1948 . .	279,541	263,237	492,900
1949 . .	356,726	328,349	709,626
1950 (estimated)	395,834	381,982	925,000

In addition, local authorities at the end of 1950 had received approval for loan works totalling £562,609, but for reasons mainly arising out of material difficulties had not taken up these funds.

The salient points of the system of Government grants to local authorities, introduced in 1949, are that the Government pays to the local authority a contribution in lieu of rates on all Government rateable property, meets one-half of the public health expenditure incurred by the local authority, is financially responsible for the cost of national roads passing through a town and makes over one-half of all the licence fees collected for vehicles in the town. There are also certain minor grants, including an African housing subsidy.

The differential rating system is followed, i.e. the local authority may levy rates at different amounts on the capital value of lands and/or buildings. Water and Electricity Undertakings are financed from a tariff on consumption, usually at slightly over cost. Local authorities also receive trades licence fees and charge for sanitary services.

In 1946 a Local Government Department was established, and it has been possible to fill the principal posts with officers with local government experience in the United Kingdom and other territories. A Municipal Association of Northern Rhodesia was established in 1947 and takes the lead in co-ordinating opinions and in initiating changes of policy or legislation. The Government co-operates fully with the Association. One of the portfolios created in 1949, whereby Unofficial Members of Executive Council assumed responsibility for groups of Departments, was that of Health and Local Government. The Member of the Legislative Council appointed to the post had formerly been mayor of one of the municipal councils.

Management Boards have been appointed for the four Mine Townships of the Copperbelt to organise public services and to pass regulations and by-laws binding on local residents. The finances of Mine Management Boards are not subject to the same degree of central

government control as those of other townships and municipalities, nor do they receive Government grants.

The only local government activity outside towns and native areas is the work of Road Boards in farming areas. These Boards administer funds for road construction and maintenance voted by the Government. They are not rating authorities or elected. Discussions have taken place on the establishment of District Councils to be formed by the fusion of one or more Road Boards and Townships into single units. The object was to create a local government unit with greater financial resources capable of being given wider powers and of employing more specialised staff. The proposals have been accepted in principle by the Road Boards and smaller Management Boards in the Southern Province and progress may be expected in 1951.

Chapter 4 : Weights and Measures

Imperial weights and measures are in use in the Territory.

An Inspector of Weights and Measures was appointed in August, 1946, and was temporarily allocated to the staff of the Price Control Department, acting also as an Inspector under the Price Control Regulations. This arrangement proved unsatisfactory and in 1947 the Inspector was transferred to the Police. He undertook numerous inspections during the year.

Chapter 5 : Newspapers and Periodicals

The following is a list of the European newspapers circulated in the Territory (no periodicals are published in Northern Rhodesia) :

The Chronicle, P.O. Box 585, Bulawayo.

Central African Post, P.O. Box 395, Lusaka.

Livingstone Mail, P.O. Box 97, Livingstone.

Northern Rhodesia Advertiser, P.O. Box 208, Ndola.

Northern News, P.O. Box 69, Ndola.

An African newspaper is published in the Territory by the Information Department of the Government ; it is *Mutende*, P.O. Box 210, Lusaka.

Chapter 6 : Bibliography

PUBLICATIONS OF GENERAL INTEREST RELATING TO NORTHERN RHODESIA

- Expedition to the Zambezi and Its Discovery of Lakes Shirwa and Nyasa.* By D. and C. Livingstone. (John Murray, London, 1865. 21s.)
- The Lands of the Cazembe.* Translation of Dr. Lacerda's diaries and information about Portuguese expeditions. By Sir Richard Burton. Published by the Royal Geographical Society. (John Murray, London, 1873.)
- Livingstone and the Exploration of Central Africa.* By Sir H. H. Johnston. (Phillip and Son, London, 1894. 4s. 6d.)
- On the Threshold of Central Africa.* By F. Coillard. (Hodder and Stoughton, London, 1897. 15s.) Contains an account of the social and political status of the natives.
- Exploration and Hunting in Central Africa.* By A. St. H. Gibbons. (Methuen and Co., London, 1898. 15s.) Contains a full, careful description of the Upper Zambezi and an account of the subjects of Chief Lewanika.
- Au Pays des Ba-Rotsi, Haut-Zambezi.* By A. Bertrand. (Hachette, Paris, 1898. English Edition, Unwin. 16s.)
- In Remotest Barotseland.* By Colonel C. Harding. (Hurst and Blackett, London, 1905. 10s. 6d.)
- The Great Plateau of Northern Rhodesia.* By H. Gouldsbury and H. Sheane. (Arnold, London, 1911. 16s.)
- The Ila Speaking Peoples of Northern Rhodesia.* By Rev. E. W. Smith and Captain A. M. Dale. (Macmillan and Co., London, 1920. 2 vols., 50s.)
- Land, Labour and Diet in Northern Rhodesia.* By Audrey I. Richards. (International Institute of African Languages and Culture, Oxford University Press, 1939.)
- In Witch-bound Africa.* By F. H. Melland. (Seeley, Service, London, 1923. 21s.)
- The Making of Rhodesia.* By H. Marshall Hole. (MacWilliam and Co., London, 1926. 18s.)
- The Way of the White Fields in Rhodesia.* By Rev. E. W. Smith. (World Dominion Press, London. 1928. 5s.)
- The British in Tropical Africa.* By I. L. Evans. (Cambridge University Press, 1929. 12s. 6d.)
- The Lambas of Northern Rhodesia.* By C. M. Doke. (Harrap, London, 1931. 36s.)
- Native Tribes of North-Eastern Rhodesia.* By J. C. C. Coxhead. (London Royal Anthropological Institute, 1914.)
- British South Africa Company's Reports on the Administration of Rhodesia.*
- War and Northern Rhodesia.* An account of the Territory's War Effort. (Information Department, Northern Rhodesia. 1s.)
- Northern Rhodesia Handbook.* A guide book for tourists. (Information Department, Northern Rhodesia. 2s. 6d.)

GOVERNMENT PUBLICATIONS OBTAINABLE FROM
GOVERNMENT PRINTER, LUSAKA

The Crown Agents for the Colonies, London, are agents for the sale of publications issued by the Northern Rhodesia Government.

A current list of publications is obtainable, free of charge, from the Government Printer, P.O. Box 136, Lusaka.

African Housing. A report published by the Standing Committee on African Housing, February, 1949, 5s.

Africans in Industry. Report of Commission, October, 1947, 1s.

African Representative Council. Verbatim reports of proceedings, 1s.

Agriculture. Report on Agricultural Industry, October, 1931, 2s.

Agricultural Survey. Report of Commission, 1929 (postage 8d.), 7s. 6d.

Air Law of Northern Rhodesia. As in force on 31st March, 1950 (obtainable from Department of Civil Aviation), 7s. 6d.

Annual Report on Northern Rhodesia for 1949. Issued by the Colonial Office 2s. 6d.

Bemba Chiefs. By W. V. Brelsford, 1948, 3s. 6d.

Birds of Northern Rhodesia. A check list by C. M. N. White and J. M. Winterbottom, 1947, 2s. 6d.

Blue Book, 1948. (Postage 6d.), 10s. 6d.

Brickmaking. By C. W. Kiln, 1s.

Cattle Industry. Memorandum compiled by Veterinary Department, 1937, 1s.

Census of Population. October, 1946, 7s. 6d.

Central African Council:

Report of Organisation and Research. By Dr. J. E. Keyston, 1949, 5s.

African Housing, 5s.

Copperbelt Markets. By W. V. Brelsford, 2s.

Cost of Living. Final Report of the Commission, 1950, 5s.

Development Authority Report. June, 1948, to December, 1949, 2s.

Development, The Ten-year Plan. February, 1947, 2s.

Development, Industrial. 1946, 2s.

Development of Secondary Industries. By Dr. W. J. Busschau, 1945, 2s. 6d.

Departmental Annual Reports. 1s. to 2s. 6d each. (Apply to Government Printer for list.)

Economic and Statistical Bulletin. Published monthly by the Central African Office of Statistics, Salisbury, 6d.

Education of Women and Girls. Report, 6d.

Estimates, Approved, for 1951, 10s.

Estimates, Approved, Development Fund, 1951, 2s. 6d.

European Education, Further Secondary, 1946, 6d.

European Education. Investigation by Committee, 1948, 2s. 6d.

European Housing. Report of Committee, 1947, 1s.

Financial Relationships. Report of Committee, 1949, 2s.

Fish Culture. By T. Vaughan-Jones, Director of Game and Tsetse Control, 1947, 1s.

- Gazette, Official Government.* Published weekly :
 Within Northern Rhodesia—Annual subscription, 12s.
 Other countries—Annual subscription, 13s. 6d.
 Single copies, 6d.
 Back numbers, 1s.
- Hansard.* Verbatim reports on proceedings of the Northern Rhodesia Legislative Council. No fixed price for annual subscription, 2s. 6d. each.
- Illegal Brewing.* Report of Inquiry, 1s.
- Import and Export List, 1950, Official,* 2s.
- Information for Intending Settlers.* Land Board. (Obtainable from the Secretary, Land Board, Lusaka.)
- Land Board.* Constitution and Terms of Reference, 2s.
- Laws of Northern Rhodesia.* Revised to 31st December, 1950 :
 Contained in seven loose-leaf volumes, £10 10s.
 Annual subscription, £2 2s.
 Separate Acts available (apply to Government Printer for list.)
- Law Reports of Northern Rhodesia.* Cases Determined by the High Court. (Volumes I, II and III out of print.) Volume IV (1948) £1 1s.
- Licence and Stamp Ordinance, Operation of.* Report of Committee, 1947, 5s.
- Maize Production, Cost of.* Report of Committee, 1948, 6d.
- Management Boards, Constitution of,* 1949, 2s.
- Mining and Explosives Regulations, 1950,* 2s.
- Native Locations in Urban Areas.* Report of Commission, 1943, 2s.
- Native Taxation.* Report of Committee, 1948, 1s.
- Native Tribes of the Eastern Province, 1949,* 7s. 6d.
- Official Handbook of Northern Rhodesia.* 1950 Edition, 2s. 6d.
- Police Commission.* Report of Commission of Inquiry, June, 1946, 7s. 6d.
- Proposed Forty-hour Week in the Copper Mining Industry,* 2s.
- Register of Voters,* 1s.
- Semi-permanent Housing.* By Desmond Agg, 5s.
- Silicosis.* Arrangements for Medical Examinations, 1945, 6d.
- Silicosis.* Examination into Dust and Ventilation Conditions in the Copper Mines, November, 1944, 2s. 6d.
- Silicosis Hazard.* Report of Investigation, 1948, 1s.
- Silicosis Legislation, 1949,* 2s.
- Small Earth Dam Construction.* By T. W. Longridge, 1s.
- Status and Welfare of Coloured Persons,* 2s.
- Vegetation and Soil Map of Northern Rhodesia.* Compiled by C. G. Trapnell, 5s.
- Water Reconnaissance.* By Professor F. Debenham, 2s.
- Workmen's Compensation Ordinance, 1948,* 1s.

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